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PRINCIPAL CONTENTS.

Weights and Measures.—The Metrical System.....	1149
Louisville and Nashville Railroad	1150
Gold's Steam Heating Apparatus	1151
The Wallkill Valley Railroad.....	1151
Bridge over the Susquehanna	1152
Opening of the Pacific Railroad	1152
Junction Railroad	1153
Preferred and Guaranteed Stocks.....	1154
Canal Stocks and Bonds.....	1154
Mining and Miscellaneous Stocks	1154
City Passenger Railroad Share & Bond Lists.....	1155
Federal and State Securities	1156
Labor and Capital	1157
Rights of Carriers.—Duties of Consignors.....	1157
Grand Trunk Railway of Canada	1159
New York City and County Loans.....	1160
Railroad Earnings.....	1163, 1161
Railroad Bond List	1162, 1163, 1164
Railroad Share List.....	1165, 1166, 1167, 1168
Stock Exchange and Money Market.....	1169
Daily Stock Sales.....	1169

American Railroad Journal.

New York, Saturday, December 5, 1863.

Weights and Measures.—The Metrical System.

A bill is pending in the British House of Commons for the adoption of the French system of weights and measures, known as the metrical system. The controversy naturally arising out of a proposed change as great as this, has been ably carried on among the learned, and how it will end it is impossible to foresee. After a careful examination of the arguments we have come to the conclusion, that the English system suits the English better than the metrical; and what is very singular is the fact that the French people themselves do not conform to their own laws on the subject.

For more than a hundred years the subject of a uniform standard of weights and measures has interested the world. Our own country has also engaged in its consideration, and one of our most interesting public documents was that prepared by the late John Quincy Adams, appointed a commissioner to make a report upon it. The first

idea of obtaining a true standard of length was taken from the vibrations of the pendulum, and to deduce therefrom an invariable model for all weights and measures. And this the English savans preferred, because the movement of a pendulum is ascertained to be made through equal areas in equal times, and because when of a certain length it beats seconds, or vibrates in equal times. It is easy to see therefore, that this being the case, its length to produce this being known, the result would be invariable. But it was found that in different latitudes, the oscillations were not the same, the figure of the earth not being spherical, and the force of gravitation at different parts of its surface not being equal. The 45th degree was therefore chosen as a mean, being the half of 90; the distance between the poles and the equator. This was believed as accurate as it was possible to be. The French themselves for a time inclined to this view of the subject, and the National assembly in the close of the reign of Louis XVI, adopted a decree, requesting the English Government to unite with their own in obtaining that standard. It did not come to anything, either through the obstinacy of George III, or the disturbed condition of public affairs. The French had not up to that time contemplated the adoption of the metrical system. On the contrary, they originated a number of scientific expeditions to ascertain what the beats of a pendulum of a given length would be in different parts of the earth's circumference. And this was effected by taking watches that were known to beat seconds regularly at Paris, to other parts of the world, as at the equator and at Lapland, and comparing their beats with those of a second pendulum. From these observations it was clearly ascertained that the second beating pendulum had to be increased in length by a regular series in going from the equator to the poles. After long and labored discussions among their principal astronomers and mathematicians, a report in favor of adopting the meridian as the best standard of linear measure, was made to the Academy in 1791, by Laplace, Condorcet, Borda and Monge, all eminent men. If we had space it would be a pleasing task to refer to the ingenious arguments they offered against the adoption of the pendulum standard, and in favor of the arc of a meridian,

and also the reasons why an arc of the equator should not be adopted. Means were then taken to procure accurate measurements of a meridian in various parts of the globe, and it is an interesting fact not known to all who have heard time out of mind of Mason and Dixon's line in this country, that these persons measured two degrees in the State of Pennsylvania, probably being the most accurate of them all, which was referred to in the settlement of the question. Finally the meridian which had been measured in Peru was adopted as a standard by the French commission, and the ten millionth part of this meridian was declared a *metre*, by the law of the 10th of December, 1799. This is equal to about $39\frac{1}{2}$ inches English. Notwithstanding very considerable errors have latterly been detected in the original meridional measurement, the French system has been retained, and it is as follows. From the metre thus obtained it will be perceived by multiplication decimally, the following results are arrived at. Thus:—

The ten millionth of the quadrant, or distance from the equator to the poles is $39\frac{1}{2}$ inches, or 1 metre—length.

The cube of the 100th of a metre of water at its greatest density weighs, 1 gramme—weight.

The cube of the 10th of a metre holds 1 litre—capacity.

The cube of 1 metre is 1 stère—solidity.

The square of 10 metres is 1 are, square measure.

These starting points being settled, the division of them for practical purposes is made as follows, by adding the decimal increase to the above terms:

LENGTHS.

Milli metre or 1,000th of a metre.....	.001
Centi metre or 100th " .....	.01
Deci metre or 10th " .....	.1
1 metre	1
Deca metre or 10 metres	10
Hecto metre or 100 "	100
Kilo metre or 1,000 "	1000
Myria metre or 10,000 "	10000

Weights.—The unit of weight under the French system is the gramme, which is ascertained by weighing that quantity of distilled water which is contained in a cube of a centi metre or 100 metres.

This is found equal to 15,433 grains Troy, and

16,924 grains avoirdupois. These are multiplied in tenths by the affixing of the Greek terms Deca, Hecto, Kilo, Myria, or divided, by the Latin Deci, Centi, Milli. Kilogramme therefore means 1,000 grammes, and is equivalent to 2 lbs., 3 oz., 4 drachms, and 16 grains avoirdupois, English, and this weight is common in commercial transactions.

Capacity.—The litre is the measure of capacity, and is obtained by ascertaining the weight of a deci metre, equal to 16,028 cubic inches, or $1\frac{3}{4}$ pint imperial of water, or 1,000 grammes exactly, or one kilogramme.

It is multiplied or divided by the same prefixes we have already given. The Bordeaux ton well-known to importers of wine in this country is 981,818 litres, or 1,640 pints English.

Land Measure.—The French unit of land measure is a square of ten metres each side, and called an are. This is multiplied or divided in the same way as before by the use of the Greek and Latin prefixes.

Solid Measure.—The unit of this measure is a cubic metre, and it is also multiplied or divided as before stated.

The French system obtains in many parts of Europe and South America. Our merchants, who for example ship to Colombia, are obliged to make out their invoices in kilogrammes, as the duties in that country are very absurdly regulated by the weight and not the value of the articles, with very few exceptions.

The English on the contrary, up to this moment are regulated by the pendulum. The act of parliament of January, 1826, called the *act of uniformity* establishing the Imperial system, required the following to be the standard, viz: A pendulum which should vibrate seconds in London, on a level with the sea in a vacuum. All that portion of the pendulum lying between the axis of suspension and the centre of oscillation, (for these are different,) is then to be divided into 391,393 equal parts, 10,000 of these parts make an inch imperial, twelve a foot and thirty-six a yard.

Weight.—The unit of weight is a cube of one inch of distilled water at 62° Fahrenheit. This is weighed by any weight, and such weight is then to be divided into 252,458 equal parts. A thousand of these parts make a grain Troy, 5,760 grains a pound Troy, and 7,000 a pound avoirdupois, the operation being performed in the air. Ten pounds of these make a gallon, containing 277 cubic inches, and 274-1000 parts of another cubic inch.

It is a curious circumstance, that both in France and England notwithstanding legislation has absolutely fixed the standards of weights and measures, they are not fully observed.

The French astronomers, geographers and seamen, calculate by degrees and minutes. The market women sell eggs at so many liards each, equivalent to the 4th part of a sou. Potatoes, beans, peas, charcoal and wood, are not sold by the metrical or decimal system, nor wine, nor grain, nor is small change current on this principle.

The stone weight in England varies in ten different numbers of lbs., according to locality and custom. So of the quarter, which may be 28 or 30 lbs. So of the ton which may be 20 cwt. of 112 lbs., or 120 lbs. There are English, Scotch and Irish miles; in cloth measure, nails, quarters,

ells; in surveyors' work, links, chains, rods, poles, perches; in navigation, fathoms, knots, leagues, and geographical miles; and then there are the palm, the pace, the step, span, cubit, and the screw and iron gauges.

So in our own country we hear of cords of ore in the mining districts instead of tons, a most curious, yet found to be a practical, useful, and easy method of measurement.

Many of our most learned and philanthropic countrymen have turned their attention to this subject, in hopes of procuring a uniformity of system throughout the world; and foreign scientific Congresses have sympathized with them in the attempt.

We have no faith in their success as long as humanity is what it is, any more than we have in the plan of a universal language, long ago suggested by Bishop Wilkins.

When the lion lies down with the lamb, when men shall learn war no more, when all shall think alike and act alike; in short, when the millenium arrives, when weights and measures shall go out of use by losing their necessity, and when all men shall believe in all men, and work for love and not for money, then and not till then shall we be able to attain uniformity in weights and measures, and not till then.

Louisville and Nashville Railroad.

The annual meeting of the stockholders of this company was held in Louisville on the 5th of October last. The Annual Reports of the President and Directors, Secretary, Superintendent of Transportation, and Superintendent of Machinery and Road Department, were read, adopted and ordered to be printed. We have been favored with a copy of this report, from which we learn that the receipts from transportation, etc., during the fiscal year ending June 30, 1863, were:

	Memphis Branch.	Lebanon Branch.	Main Stem.
From passengers	\$20,643 76	\$55,503 68	\$773,240 22
" freight	16,274 41	35,109 03	642,595 03
" express	3,264 87	6,210 21	56,993 08
" rent	.....	140 00	.....
" mail, etc.	.....	.....	30,328 39
Total Main Stem	.....	.....	\$1,503,156 67
" Lebanon Branch	.....	.....	96,962 92
" Memphis Branch	.....	.....	40,183 03
Amount charged U. S.—being difference between Government and local tariff on freight from April 1, 1862 to Jan. 1, 1863	.....	.....	137,680 93

Total main line and branches, viz:

From passengers	\$849,387 66
" freight	831,659 40
" express	66,468 11
" mail, etc.	30,468 39
	1,777,983 56

And the expenses have been:

Repairs of road	\$163,436 41
" bridges	10,330 49
" buildings, etc.	10,553 61
" cars	36,408 66
" engines	29,471 59
Motive power	42,431 55
Fuel	49,211 14
Oil and waste	7,211 87
Watchmen	7,870 11
Loss and damage	5,979 32
Salaries	15,099 80
Transportation	80,083 65
Miscellaneous	28,260 20
Reconstruction	229,470 07
	715,818 47

Net earnings (59.74 per cent.) \$1,062,165 09

In March last application was made by this company to the Secretary of War for a restoration of the tariff of freights existing before the war. This was allowed, upon condition that the company pay for the Cumberland River Bridge at Nashville, and other bridge repairs and work done by the government. These terms were acceded to, and the earnings of the fiscal year made up according to the company's tariff rates of freight, and not that of the government. The above amount of \$137,680 93 is the difference between the local tariff and the amount charged at the government rates on all government freight carried from April 1, 1862, to Jan. 1, 1863.

The road was in operation through to Nashville for a period of 7 months and 12 days—during the balance of the year it was only partially operated. The time during which it may be considered to have been operated for its entire length is equivalent to $9\frac{1}{2}$ months.

The following table shows the comparative cost of repairs of road per mile during the past four years:

	Ordinary Repairs.	Renewal of iron ties.	Total per mile of road.	Per revenue train mile.
1859-'60	\$470 73	\$135 00	\$605 73	26.03 cents
1860-'61	339 54	48 93	388 47	14.84 "
1861-'62	321 28	219 78	541 06	38.18 "
1862-'63	382 29	389 56	771 85	38.30 "

During the year upwards of 433 tons of new iron were purchased, 95 tons of which were used to replace iron destroyed by the rebels. About 95 tons have been re-rolled, and 333 repaired and used on the 1st division. Besides which the defective ends of 225 tons of the tubular iron on the 2d division have been cut off, and the rails welded solid at the ends. The total amount of new, re-rolled and repaired rails used during the past year is 1122 tons. This amount was not sufficient for the necessities of the road, but it was impossible to obtain more. At least 2,500 tons of new iron will be required during the coming year. The cost of repairing solid rails has been \$4 per ton, and that of repairing tubular rails \$6.35 per ton. Upwards of 16,000 cross-ties were purchased during the year, all that could be procured by contract. At least 40,000 new ties will be required during the ensuing year.

The business of the Lebanon Branch was seriously hindered by the destruction of bridges. The cost of repairs and renewals during the year was \$341 32 per mile, or 50.02 cents per revenue train mile. During the year, 22 tons of iron have been repaired, and 4,367 new cross-ties put in the track; 200 tons of new iron, and 10,000 cross-ties will be required during the coming year to keep the track in order.

The Memphis Branch has been obstructed during the greater portion of the year, although the trains were run on a part of it all the time. It may be considered to have been in use its whole length about 9 months. The cost of repairs per mile per year has been \$232 26, and per train mile 32.78 cents.

The engines have run in the service of transportation department 519,742 miles at a cost for repairs of \$29,471.59; in the service of the road department, and on the Bardstown Branch and Memphis, Clarksville and Louisville Railroad, 75,516 miles, at a cost for repairs of \$3,813.73. Total miles run, 595,258. Total cost for repairs,

\$88,285.35, or 5.59 cents per mile run. Total cost per mile run by engines, 24.03 cents, against 23.06 cents in 1861-'62, and 18.49 cents in 1860-'61. Average cost per mile of all trains 28.72 cents.

The Bardstown and Louisville Railroad 18 miles, has been operated as a branch of this road under a contract made Feb. 24, 1860, by which this company were to furnish the motive power and rolling stock, and were to divide the net profits after paying expenses. The accounts were settled up to March 31, 1861. The earnings from that time to June 30, 1863, were \$20,469.46, and the expenditures for running, repairs and reconstruction, \$19,011.71. The operation has not been profitable, but is a great convenience in procuring material, etc.

The company also agreed to operate the 14 miles of the Memphis, Clarksville and Louisville Railroad, between the State line and Clarksville, and to divide the profits after paying cost of operating. The rebel raids and unsafe condition of the country prevented the operation, except for a few months. The gross earnings of the 14 miles for the three months ending with June were \$554.23; and the cost of operating including the amount expended in the re-construction of the Red River bridge, \$6,811.89. This contract may be terminated on ten days' notice, the Clarksville company refunding the cost of the bridge, and balance due this company.

The equipment of road July 1, 1862, consisted of 37 locomotives; 18 passenger, 6 baggage, 4 express, 166 box, 102 flat, and 5 boarding cars. These have been added during the year, 6 locomotives; 10 passenger, 4 baggage, 4 express, 111 box, 28 flat, and 6 boarding cars. There have been destroyed by raids, 1 passenger, 2 baggage, 45 box, 7 flat and 4 boarding cars.—Leaving on the road July 1, 1863, 43 locomotives; 27 passenger, 8 baggage, 8 express, 232 box, 123 flat and 7 boarding cars.

CONDENSED BALANCE SHEET.

MAIN STEM.

Grading and masonry	\$2,288,867 59
Railway superstructure	1,660,239 19
Locomotives	358,915 40
Rolling stock	305,766 45
Sundry interest accounts	1,138,800 99
Depot grounds	102,949 45
Lands for road and stations	99,815 16
Depot buildings, shops, stations, etc.	175,194 81
Bridge superstructures	283,944 35
Engineering expenses	230,761 94
Locomotive works	84,682 02
Construction account	102,210 35
Office and agency expenses	74,819 76
Contingent and court expenses	33,484 63

Total cost of road	\$6,940,452 07
Accounts due the Co.	\$556,579 29
Materials on hand	87,772 08
Real state	5,750 91
Cash on hand	17,887 31
Memphis Branch	26,771 61
Lebanon "	134,030 99

	828,792 19
Capital stock	\$7,769,244 26
First mortgage bonds	\$4,562,295 46
State of Tennessee	1,804,000 00
Back interest	560,500 00
Second mort. bonds given for interest	14,483 36
Due contractors, etc.	26,900 00
Bills and pay rolls for June, 1863..	8,403 76
Profit and loss account	71,745 75
	725,915 93

\$7,769,244 26

LEBANON BRANCH.

Grading and masonry	\$253,137 62
Railway superstructure	327,006 47
Sundry interest accounts	270,339 19
Lands for roads and stations	6,594 98
Construction account	204,270 72
Legal and contingent expenses	6,432 16

Total cost of road	\$1,067,781 14
Real estate, notes, etc.	549 49

	\$1,069,330 73
Capital stock	\$562,878 78
Due Main Stem	134,030 99
" sundry contractors	327 16
City of Louisville bonds loaned	225,000 00
Mortgage bonds	108,000 00
Back interest	4,995 91
Second mort. bonds given for interest	5,400 00
Profit and loss	27,697 89

MEMPHIS BRANCH.

Construction account	\$818,664 78
Locomotives	70,283 13
Rolling stock	48,129 30
Sundry interest accounts	183,446 81

Total cost of road	\$1,120,524 02
Due for bonds sold	614 69

	\$1,121,138 71
Capital stock	\$767,025 24
Mortgage bond account	300,000 00
Back interest	827 75
Second mort. bonds given for interest	5,700 00
Due Main Stem	26,771 61
" sundry persons	1,238 06
Profit and loss account	19,576 05

	\$1,121,138 71
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CONSOLIDATED STATEMENT.

Cost of road and branches	\$9,128,757 23
Resources	669,153 87

	\$9,797,911 10
Capital stock	\$5,892,199 48
Bonded debt	2,997,500 00
Floating debt	76,714 73
Back interest	58,307 02
Profit and loss	773,189 87

	\$9,797,911 10
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The office of the company is at Louisville, Ky.

The officers and directors are:

President—JAMES GUTHRIE.

Directors—James Guthrie, Thomas Quigley, U. E. Ewing, H. D. Newcomb, James B. Wilder, James Speed, Jo. C. Guild, Russell Huston.

Secretary—WILLIS RANNEY.

Sup't of Transportation—B. MARSH.

Sup't of Machinery and Road Department—

ALBERT FINK.

Gold's Improved Steam and Water Heating Apparatus.

The component parts of Gold's Improved Steam Heating apparatus, manufactured by the Union Steam and Water Heating Company, 634 Broadway, N. Y., are the Generator and Radiator. The Generator or Boiler is made of cast iron, in separate sections, each section a complete boiler in itself. The steam and water connections between the sections being made by means of pipes, without the use of any packing whatever, and should any defect or flaw be discovered in any one of the castings, the pipes can be disconnected, and plugs being inserted in the holes, the defective section can remain in its place until convenient to replace it, thereby losing only the use of the one section; and subsequently, when the repairs are made, the cost is only that of the fractional part of the

whole boiler. In no other construction of boiler can repairs be made without losing for the time being, the use of the entire heating apparatus. An "Automatic Regulator" is connected with the draft and feed doors, which carefully guards against a waste of fuel, and the generation of more steam than is necessary to supply the wants of the Radiators. Should there be a Register closed, preventing the passage of air from one of the air-chambers, there is at once a diminution of condensation in the contained condensing chambers, and, as a matter of course, an excess of steam in the system, which makes itself felt through the automatic regulator, and reduces the consumption of fuel to the requirement of the diminished demand for steam.

The "Condensing Chambers" or Radiators are, like the Generator, made up of any desired number of cast iron sections, each complete in itself, a sufficient number being united to form the required amount of warming surface for any given locality. These are connected with the Generator by means of pipes, and placed directly under the parts of the building to be warmed, and each story supplied from a separate and distinct chamber of radiators, so that there is no possibility of a transfer of the heat designed for one room to another, under any change of wind, or by a stronger draught in the registers conducting to the upper apartment. The construction of these radiators admits of a very low pressure of steam (not more than one-half pound to the inch being used,) from the fact of their being made with large steam chambers, throughout which the lowest pressure is sufficient to cause the steam to circulate.

A complete apparatus, fully illustrating every point of construction, is on exhibition at the office of the Company, where the public are respectfully invited to call and examine this novelty in warming apparatus.

In presenting this valuable improvement in heating apparatus to the public, the Company have no desire that the statements made regarding it shall be received without full investigation. On the contrary, they invite the strictest scrutiny into the construction and operation of the apparatus. And to that end they are ready at all times to substantiate the correctness of everything that is asserted above, and to convince the most skeptical that Gold's Heater stands unrivalled for Economy, Safety and Durability; and, moreover, that it is the only Heater that warms without vitiating the atmosphere.

The Wallkill Valley Railroad.

We have received the report of Geo. S. Avery, Esq., engineer, with accompanying estimates and calculations in relation to the Wallkill Valley railroad, which it is proposed to construct from Washingtonville, on the Newburgh branch of the Erie Railway, to Shawangunk village in Ulster Co. The report is also accompanied by an excellent map.

The road is to be $13\frac{3}{8}$ miles in length, and its cost is computed at \$16,320 17 per mile, and we have no doubt it can be constructed at that rate, if it is to be exempt from the manipulation of bondholders, bankers, and commission agents. The actual cost entire will then be but \$218,285 01. The estimates of receipts from passengers, from and between Little Britain and Coldenham, (the

early homes of the Clintons and Coldens,) and Walden and Shawangunk are put at \$6,832 per annum; the milk freight from the same places at \$21,291 66; the general freight at \$12,667 20; and the mails and express \$1,000—being a total of \$41,791 66. We think the estimate of passengers altogether too low, for besides this way travel between the villages, there will arise a large increase of travel through to New York, not only from these places but from a large distance. It is estimated that the business circle around a railway station, on any great through line is equal to thirty miles if there is no competing line; so that the business of at least fifteen or twenty other thriving villages may be considered as likely to be given in great part to this road, which opens for them a new and short route to the City of New York.

The maximum grade is but 50 feet, and the minimum is 6 feet. The curves are easy and occur but seldom.

The resources of the road besides the one of passenger traffic, are the enormous amounts of milk, butter and cheese, which Orange and Ulster Counties produce. The Wallkill Valley is one of the most productive, healthful, and beautiful in the State of New York. On the Wallkill River are thriving manufacturing villages, such as Montgomery, Walden, Shawangunk, Galeville, Tuthill, Bruynswick, where there is a thriving population with numerous factories, flour mills, and a large unemployed water power. As the route is an easy one for construction, the road can readily be put in operation in one year.

The report offers many considerations to induce the parties most nearly affected in interest to give it their support, all of which are so obvious, so undeniable, and so well sustained in the example of the Warwick road, which has proved a great success, that we need not add any arguments of our own.

The Wallkill road is a necessity, it will be a productive and paying road, it will enhance the value of the farm lands and village plots through which it will pass, afford new markets to many of the agriculturists of Ulster and Orange, and will naturally affect the prices of many descriptions of food in the city of New York, give larger supplies and keep the prices steady. Every such railway at the Wallkill should find friends among our merchants and capitalists, for our working population must be fed and well fed, if industry is to flourish, and our laboring people are to thrive.

An important part of the plan in building this road is to have it extended through Ulster and the other "west side" river counties to Albany, thus giving a through "west side" railroad in connection with the Erie Railway from New York to that city.

The *St. Paul Press* thus enumerates the railways which are about to be constructed, in connection with that place—viz.: first, the St. Paul and Pacific, the main line between the Minnesota and Mississippi rivers; second, the branch line of the St. Paul and Pacific, north of the Mississippi rivers; third, the Superior and Mississippi; fourth, the Cedar Valley; fifth, the Minnesota Valley; sixth, a branch of the Tomah and St. Croix from Prescott; seventh, the Winona and St. Paul; and there is even a considerable probability that an eighth will be built, viz: from St. Paul via Hudson to Bayfield.

Bridge over the Susquehanna.

The following is a description of the new railroad bridge now being constructed over the Susquehanna river at Havre-de-Grace, by the Philadelphia, Wilmington and Baltimore Railroad Company: The bridge will be supported by thirteen piers, erected in the river, at the distance of twenty-four feet apart, the entire length of the bridge being 3,300 feet. It is well known that during the winter season the Susquehanna at this point, where the bridge is being erected, is subject to heavy drifts of ice, that would render a bridge not substantially built liable to be carried away. This matter has received full attention at the hands of Mr. GEORGE A. PARKER, the engineer of the road, and piers for the support of the bridge are being constructed that might well defy the onslaught of all the ice that ever drifted down the river, combined in one grand attack on said piers. But one of these piers is as yet near completion, but another is being rapidly pushed forward.

An idea of the solidity of the foundation of the bridge can be arrived at from a brief description of the manner of constructing the piers. We will take pier Number Three, which is now in a somewhat advanced state, as a sample of the rest. The depth of water at this pier is forty-two feet. Piles have been driven for the support of the pier, and the interstices filled up with stone. These piles have been sawed off by means of an ingenious contrivance, so that they present a flat even surface at the bottom of the river. A wooden platform, four feet thick, rests on these piles, and is securely fastened to the same. A wrought iron caisson, or hollow frame of that material, twenty-four feet in length and eight feet in width, with sharpened ends pointing up and down stream, rests securely on this platform; said caisson forming an outside covering to the masonry, which constitutes the main strength of the pier.

This caisson is lowered to its position in the stream by means of a mechanical contrivance, of the cog-wheel order, which lowers the caisson three-eighths of an inch for every revolution of a wheel about twenty inches in diameter. When the said caisson is securely fastened to the platform that rests on the piles the masonry is built up inside of it, which consists of massive granite blocks, about four feet by two in dimensions. The iron work of these caissons vary from one-eighth to one-third of an inch in diameter, and when the pier is completed it extends upwards eleven feet from the surface of the water at low tide, which is beyond the limit of the height of ice so far. Seven of these piers are being built on pile foundations, and six on rock foundations, the stream having both a sandy and rocky bottom at this point.

The estimated cost of the bridge is \$700,000; so far, some \$200,000 have been expended, but the total expense may come under the above sum. It has not yet been decided whether the bridge will be constructed of wood or iron. It was originally intended that iron should be used, but the increased price of that article makes it a matter of some doubt whether the original idea will be carried into effect.

The railway on the bridge will consist of a single track, but it will be of sufficient width to place another track on it if occasion should warrant it. The track will be twenty-five feet from the surface of the water, and the entire height of the bridge will be fifty feet. A highway for the use of car-

riages and foot passengers will surmount this bridge.

A draw will be attached to the bridge for the passage of vessels; it will be of the pivot order, and will have two openings of seventy feet each. The weight of the spans from pier to pier will be one and a quarter tons to the foot. Portable iron piers are being used for the purpose of securing the permanent piers to the rocky foundations. These piers are light, and after being used for this purpose they can be used as permanent piers for the draw, when piles cannot be driven. The water varies in depth where the bridge is being built from five to forty-two feet, and runs with an average velocity of three miles per hour. When completed, the "Susquehanna Bridge" will be the grandest work of the kind in the United States, and a perfect triumph of engineering skill.

Opening of the Pacific Railroad.

The San Francisco papers contain accounts of the opening of a portion of the railroad which is to extend from San Francisco to San Jose. The *Alta California* informs us that this road really composes a part of the great Trans-Continental Road which is to unite the shores of the Atlantic and Pacific. It says:

In California there are three sections and three companies; First, the San Francisco and San Jose Railroad Company, which has a section of fifty miles between these two places. Secondly, the Western Pacific Railroad Company, which has a section of one hundred and fifteen miles from San Jose to Sacramento. Thirdly, the Central Pacific Railroad Company, which has the section from Sacramento to the Eastern boundary, in Truckee Valley, a distance of one hundred miles. The San Jose Railroad was the first to commence work; it is the only one which has any of its road finished; it will be the first to complete its section.

The San Francisco and San Jose Railroad Company was organized in 1860. The capital stock is \$2,000,000, of which \$300,000 was taken by the city of San Francisco, \$200,000 by the county of Santa Clara, \$100,000 by the county of San Mateo, \$500,000 by the contractors, (A. H. Houston and C. McLaughlan,) and \$300,000 by other individual subscribers. All the stock has been taken, and all the assessments have been paid, with some insignificant exceptions. The cost of the road, when complete, will just about absorb the total capital stock. The cost of the road is about \$40,000 per mile. When the road shall have been completed, the Company will receive from the National Government the sum of \$16,000 per mile in Federal bonds.

The road is not finished as yet, but about thirty-one miles of it are finished, from the Mission to Mayfield. From the latter point to San Jose the road is graded, and men are at work laying down the iron, of which four hundred tons—enough for five miles—are on hand, and a thousand tons or enough for thirty miles, are due. Only eight hundred tons more are required to complete the road. It is expected that the cars will run through from Fourth street to San Jose in December next.

The Western Pacific Railroad Company, organized to build the road from San Jose to Sacramento, a distance of one hundred and fifteen miles, will, in three weeks, make an earnest commencement by grading the road from San Jose to Vallejo's Mill, a distance of eighteen miles. The route is to pass through the Contra Costa ridge of the Coast Mountains, through the canon of Alameda Creek, and after passing through Sunol Amadore and Livermore Valleys, will cross the Diablo ridge of the Coast Mountains by the Corral Hollow Pass, and thence go direct to Stockton. The route has been finally determined upon, and there is scarcely any doubt that it will be so located. The surveying party are now at Carroll Hollow.

Mr. T. Dame is President of both roads, and several of the directors in one are also directors in the other.

Qualified Stockholders.

A question having arisen as to the qualifications necessary in this State, to enable stockholders to vote at the election for directors, and to render stockholders eligible as directors, we produce the law upon the subject:

"In the election of directors, each stockholder shall be entitled to one vote, personally or by proxy, on every share held by him thirty days previous to any such election." "No person shall be a director unless he shall be a stockholder, owning stock absolutely in his own right, and qualified to vote for directors at the election at which he shall be chosen."

The General Railroad Law of Pennsylvania says:

"No share or shares transferred within sixty days next preceding any election, or general meeting of the stockholders, shall entitle the holder or holders thereof to vote at any election or general meeting; nor shall any proxy be received, or entitle the holder to vote, unless the same shall bear date, and have been duly executed within the three months next preceding such election or general meeting."

DANIEL STONE, the celebrated bridge builder, died recently in Philadelphia, during a fit of temporary insanity. Mr. Stone has been connected with the business of bridge construction for over twenty-five years. There is scarcely a railroad in the Eastern and Middle States that have not upon their great lines the evidences of his skill. The fine bridge over the Susquehanna at Harrisburg and vicinity, are specimens of his "handy work." The bridge at Market street in Philadelphia is another. In fact, to enumerate and write the history of the works executed by him, would be to write the history of most of the railway enterprises of the country. His name deserves to stand recorded near to and along with "Wernwag, Burr and Ellet."

New Railroad to the Coal Fields of Pennsylvania.

Another project has just been started, having for its object the construction of a branch railroad from West Greenville, Penn., to the coal fields of Mercer, Butler and Armstrong counties in that State. The route most talked of will commence on the line of the Atlantic and Great Western Railroad, near West Greenville, and run thence via Mercer to the coal fields. The *Argus*, alluding to the matter, says: "We learn that work will commence soon, so far at least, as preliminary surveys are concerned, and the character of the parties having charge of the project is a pretty sure indication that it will be carried through. The coal fields which it proposes to open up are very extensive, and the coal is of an excellent quality. The field extends beyond the limits of Butler county to the eastward into Armstrong county. Extensive and favorable leases have been made as far eastward as Brady's Bend, by parties interested in the project."

It has long been known that veins of coal of almost fabulous thickness, and of superior quality underlie the section of country through which it is proposed to construct this road, and we are pleased to know that the treasure is now in a fair way to be developed.

The *Columbia Spy* learns that the Reading and Columbia Railroad Company intend starting a branch road at Salunga, to cross the Susquehanna by a new bridge at Chiques.

Railroad Earnings--Weekly.

The traffic of the Great Western Railroad for the week ending Nov. 27, 1863, was as follows:

Passengers.....	\$19,984 94
Freight and live stock.....	40,808 94
Mails and sundries.....	2,515 98
Total.....	\$63,309 86
Corresponding week of 1862.....	67,723 73

Decrease.....\$4,413 87

The earnings of the Grand Trunk Railway for the week ending November 21, 1863, were:

Passengers.....	\$27,747 73
Freight and live stock.....	66,179 15
Mails and sundries.....	5,647 00
Total.....	\$99,573 88
Corresponding week, 1862.....	93,294 97

Increase.....\$6,278 91

The earnings of the Chicago and Alton Railroad for the 3d week of November, 1863, were:

Passengers.....	\$15,923 42
Freight.....	29,195 27
Sundries.....	1,474 34
Total.....	\$46,593 03
Same week last year.....	26,350 14

Increase.....\$20,242 89

The approximate earnings of the Marietta and Cincinnati Railroad, in the 3d week of November, 1863, were:

Passengers.....	\$4,692 34
Freight.....	14,131 38
Mail express and telegraph.....	872 00
Total.....	\$19,695 72
Same week, 1862.....	11,641 81

Increase.....\$8,053 91

The earnings of the Galena and Chicago Union Railroad for the 3d week of Nov., 1863, were:

Freight.....	\$42,671 57
Passengers.....	10,033 57
Mails.....	1,300 00
Total.....	\$54,005 14
Same week, 1862.....	36,683 43

Increase.....\$17,321 71

The earnings of the Chicago and Northwestern Railway for the 3d week in November, 1863, were:

.....	\$33,877 32
Do., 1862.....	23,851 81

Increase.....\$10,025 51

The earnings of the Milwaukee and Prairie du Chien Railroad for the 3d week in Nov. have been:

.....	\$36,116 01
Same week, 1862.....	28,714 03

Increase.....\$7,401 98

Total from January 1, 1863.....\$1,097,260 20

1862.....1,076,415 06

Increase.....\$20,845 14

The earnings of the Chicago and Rock Island Railroad for the 3d week of November, 1863, were:

.....	\$51,316 00
Do., 1862.....	34,081 00

Increase.....\$17,235 00

The earnings of the Michigan Central Railroad for the 3d week of Nov., 1863, were:

.....	\$74,446 09
Same period, 1862.....	72,534 26

Increase.....\$1,911 83

The earnings of the Toledo and Wabash Railroad Company for the 2d week of November, 1863, were.....\$34,292 43

Same week, 1862.....38,695 43

Decrease.....\$4,405 05

The earnings of the Michigan Southern and Northern Indiana Railroad for the 3d week of Nov., 1863, were.....\$75,599 00

Do., 1862.....64,540 00

Increase.....\$11,059 00

The Junction Railroad.

The Junction Railroad, on the West side of the Schuylkill river, over which the through trains from New York to Washington now pass, diverges from the Reading Railroad at the foot of the old Inclined Plane, and passes along the river shore to Egglefield, where it crosses Torr avenue over a bridge, and then under Girard avenue, between Thirty-seventh and Thirty-eighth streets, thence to Westminster street, which is back of Solitude, known as the old Penn Property, where it crosses Thirty-fifth street, and then runs directly alongside of the Pennsylvania Railroad to near Market street. At this point it diverges, and will pass through Mansion street, and under Market, Chestnut and Walnut streets, coming out on the river slope, and thence through the Almshouse and Woodland Cemetery property, so as to connect with the Philadelphia, Wilmington and Baltimore Railroad Company at Gray's Ferry.

The cars of the Philadelphia and Trenton road diverge from the road near Lehigh avenue, and pass over the Richmond branch of the Reading Railroad to the Falls of the Schuylkill, thence on the main line to the Columbia Bridge, where they will meet the Junction road, and pass over it to its intersection with the Pennsylvania Railroad, thence by its Delaware extension to the P., W. & B. R., near the Arsenal. This route will be used until the connecting railroad of the Philadelphia and Trenton Railroad is completed.

The route proposed is as follows: Diverging from the Philadelphia and Trenton Railroad near Frankford, thence on a line half-way between Erie avenue and Venango street to Front, thence turning in a southwesterly direction across the North Pennsylvania Railroad, with bridges over Allegheny avenue, Germantown Pike, Broad street and Germantown Railroad; thence to a line parallel with and immediately in the rear of the Odd Fellows' and Glenwood Cemeteries, and across under Ridge Avenue; thence bridging over Reading Railroad, and running to Point of Rocks, north of the Spring Garden Water Works, and across the Schuylkill by a new bridge. Bridges will also be constructed over Girard avenue, on the west side of the Schuylkill; also, Thirty-sixth and Thirty-seventh streets, and the Junction Railroad, which will enable the connection to be made directly with the Pennsylvania Railroad near Thirty-fifth street.

The Illinois Central Railroad Company has instructed its London agents to give notice that a cash dividend will be declared in January on both classes of its shares, and on the cancelled bonds scrip, payable to the parties in whose names the shares and scrip are registered, and only upon an order for the entire dividend due upon either class.

PREFERRED, CANAL, MINING, AND MISCELLANEOUS STOCKS AND BONDS.

PREFERRED AND GUARANTIED R. R. STOCKS.

RAILROADS.	Amount of shares outstanding.	Div'ds			Market Price.
		Rate.	Paid.	Price.	
Atlantic & St. Lawrence (guarant'd)	\$2,494,900	6	7	7	---
Berkshire (guarant'd)	600,000	7	7	7	---
Boston, Concord & Montreal (pref.)	800,000	6	7	7	---
" " (new pref.)	554,000	6	7	7	---
Buffalo, N. Y. & Erie (guarant'd)	850,000	7	7	7	---
Camden & Atlantic (preferred)	620,800	7	23	23	---
Catawba (preferred)	1,150,000	7	30	30	---
Chemung (guarant'd)	380,000	7	7	7	---
Cayuga & Susquehanna (guarant'd)	343,500	7	7	7	---
Chesapeake (preferred)	2,017,425	7	7	7	---
Chicago & Alton (preferred)	2,464,336	7	7	7	---
Chicago & North Western (pref.)	177,750	7	7	7	---
Cocheco (preferred)	49,200	6	7	7	---
Ct. & Passumpsic Rivers (guarant'd)	833,000	8	49	49	---
Cumberland Valley (1st preferred)	241,900	8	8	8	---
" (2d preferred)	243,000	8	8	8	---
Detroit & Milwaukee (preferred)	1,500,000	7	7	7	---
Dubuque & Sioux City (preferred)	1,982,180	7	7	7	---
Elmira, Jeff. & Canandaigua (guar.)	500,000	7	7	7	---
Elmira & William-port (pr. ferred)	500,000	7	7	7	---
Erie (preferred)	8,535,700	7	7	7	---
Hannibal & St. Joseph (preferred)	6,309,23	7	7	7	---
Harrisburg & Lancaster (guarant'd)	1,182,100	7	7	7	---
Houstonian (preferred)	1,180,000	8	4	4	---
Indianapolis & Madison (preferred)	830,000	7	7	7	---
Kennebec & Portland (preferred)	247,000	6	7	7	---
" " (new pref.)	125,000	6	7	7	---
Lackawanna & Bloomsburg (pref.)	500,000	7	7	7	---
Marquette & Cincinnati (1st preferred)	5,105,384	7	70	70	---
" (2d preferred)	3,424,169	7	60	60	---
Michigan S. & N. Indiana (guar.)	2,893,600	8	135	135	---
Mil. & Prairie du Chien (1st pref.)	1,051,000	8	103	103	---
" (2d pref.)	1,014,000	7	87	87	---
Milwaukee & St. Paul (preferred)	2,235,000	7	7	7	---
New Haven & Northampton (guar.)	1,010,000	8	4	4	---
New York & Harlem (preferred)	1,500,000	8	110	110	---
Niagara Br. & Canandaigua (guar.)	1,000,000	6	8	8	---
Paterson & Hudson (guarant'd)	630,000	8	8	8	---
Paterson & Ramapo (guarant'd)	248,000	5	54	54	---
Pooria & Bureau Valley (guarant'd)	1,200,000	6	6	6	---
Philadelphia & Reading (preferred)	1,551,800	7	7	7	---
Philadelphia & Trenton (guarant'd)	1,000,000	10	58	58	---
Pitts. Ft. Wayne & Chicago (pref.)	2,000,000	7	90	90	---
Pittsfield & North Adams (guar.)	450,000	6	6	6	---
Portland, Saco & Portsmouth (guar.)	1,500,000	6	6	6	---
Railroad & Burlington (preferred)	382,700	8	8	8	---
" (preferred)	698,176	6	75	75	---
St. L. Alton & Terre Haute (pref.)	1,500,000	6	75	75	---
Toledo & Wabash (preferred)	923,200	7	80	80	---
Troy & Greenbush (guarant'd)	274,400	6	6	6	---
Vermont & Canada (guarant'd)	1,600,000	8	8	8	---
Warren (guarant'd)	1,307,750	7	7	7	---
White Mountains (guarant'd)	207,000	5	5	5	---
Wrightav. York & Gettysburg (guar.)	317,050	2	2	2	---

CANAL AND NAVIGATION BONDS.

DESCRIPTION OF BONDS.	Amount outstanding.	INTEREST		Principal payable.	Market Price.
		Rate.	Payable.		
Chesapeake & Delaware:					
1st Mortgage	\$2,057,343	6 J. & J.	1886	101	---
Chesapeake & Ohio:					
Maryland Loan, dollar	2,000,000	6 Qtrly.	1870	---	---
" " sterling	4,375,000	5	1890	---	---
Preferred bonds	1,700,000	6	18	---	---
Bonds guar. by Virginia	200,000	6	18	---	---
Delaware Division:					
1st Mortgage	800,000	6 J. & J.	1878	103	---
Delaware & Hudson:					
1st Mortgage	600,000	6 J. & D.	1865	107	---
2d Mortgage	300,000	6 M. & S.	1870	---	---
Delaware & Raritan:					
See Camden & Amb. R.R.					
Erie and Pennsylvania:					
1st Mortgage	72,000	7 J. & J.	1865	---	---
Interest Certificates	161,990	6	1868	---	---
Lehigh Navigation:					
1st Mortgage	823,172	6 M. & S.	1870	106	---
Unsecured bonds	2,773,723	6 J. & J.	'63-'65	---	---
Monongahela Navigation:					
1st Mortgage	125,000	6 J. & J.	1863	---	---
2d Mortgage	67,000	6	1865	---	---
Morris:					
1st Mortgage	465,500	6 A. & O.	1876	105	---
North Branch:					
1st Mortgage	500,000	6 M. & N.	1876	37	---
Schuylkill Navigation:					
1st Mortgage	1,764,550	6 M. & S.	1872	101	---
2d Mortgage	3,980,670	6 J. & J.	1882	89	---
Improvement	568,500	6 M. & N.	1876	89	---
Susquehanna & Tide Water:					
Maryland Sterling Loan	816,000	5 J. & J.	1865	---	---
Md. stg. loan converted	200,376	5	1865	---	---
Mortgage bonds	963,000	6	1878	66	---
Preferred Interest b'ds.	227,569	6	1873	25	---
Union, (Pa.):					
1st Mortgage	2,500,000	6 M. & N.	1883	27	---
West Branch & Susquehanna:					
1st Mortgage, s'k'g fund	450,000	6 J. & J.	1878	78	---
Wyoming Valley:					
1st Mortgage	750,000	6 J. & J.	1878	100	---

CANAL AND MISCELLANEOUS STOCKS.

COMPANIES.	Par of Shares.	Amount of Stock.	Dividends.	Market Price.
CANAL AND NAVIGATION STOCKS:				
Chesapeake and Delaware	100	1,343,563	74	74
Chesapeake and Ohio	100	8,224,695	40	40
Delaware Division	100	1,633,350	7	7
Delaware and Hudson	100	7,500,000	179	179
Delaware and Raritan	100	2,298,400	10	10
Erie of Pennsylvania	50	58,000	6	6
Illinois and Michigan	50	2,500,000	60	60
Lehigh Navigation	50	1,803,000	69	69
" (scrip)	50	726,800	8	8
Monongahela Navigation	50	1,025,000	73	73
Morris (consolidated)	100	1,175,000	139	139
" (preferred)	100	1,175,000	10	10
North Branch	100			
Sault Ste Marie	100			
Schuylkill Navigation (consolidated)	50	1,932,467	17	17
" (preferred)	50	2,722,607	33	33
Susquehanna and Tide Water	50	2,048,200	15	15
Union (preferred)	50	2,750,000	4	4
West Branch and Susquehanna	100	1,000,000	6	6
Wyoming Valley	100	500,000	6	6
STEAMSHIP AND TRANSIT:				
Central American Transit				30
Nicaragua Transit				
Pacific Mail Steamship	100	4,000,000		211
Union Steamship (Boston)				168
EXPRESS:				
Adams	100	2,000,000		
American	500	1,000,000		
National	100	250,000		
Overland Mail	100	500,000		
United States	100	800,000		
Wells, Fargo & Co.	100	1,000,000		
TELEGRAPH:				
American	100	1,000,000		
Atlantic				
INSURANCE STOCKS:				
Aetna Fire	50	200,000		47
Columbian (Marine)	100	500,000		60
Mercantile Mutual	100	600,000		3
New England Mutual (Life)				10
Washington (Fire)	50	400,000		13
TRUST:				
Farmers' Loan and Trust	50	1,000,000		89
New York Life Insurance & Trust	100	1,000,000		2
United States Trust	100	1,000,000		
LAND AND IMPROVEMENT:				
Boston Water Power				47
Boston and Roxbury Mill				60
Canton (Baltimore)	100	5,000,000		3
Cary Improvement	5	300,000		10
East Boston				13
Essex (Boston)	100	1,000,000		89
Waverly (Boston)				2
GAS-LIGHT:				
Baltimore	100		8	
Boston	500	1,000,000		850
Brooklyn	25	2,000,000		
Cincinnati				
City (Brooklyn)				
Citizens' (Brooklyn)	20			123
Hartford				
Jersey City and Hoboken				
Mahattan, N. Y. (stock)	50	4,000,000		272
" (scrip)	37			239
Maryland (Baltimore)	25			
Metropolitan, N. Y.	100			134
New Haven				
New York	50	750,000		
Philadelphia				
Pittsburg				
St. Louis				
Southwark (Philadelphia)				
Williamsburg	50			
UNCLASSIFIED:				
American Coal	25	1,500,000		90
American West India	100	1,000,000		
Baltimore Coal	100			
Baltimore and Cuba Smelting	100			145
Central Transportation				
Cherry Run Petroleum				
Cumberland Coal (preferred)	100	5,000,000		32
George's Creek Coal and Iron	100	1,000,000		71
Gold Mining of Colorado				
Hazleton Coal	50			
Hudson River Bridge	100			
Mariposa (gold)	100	10,000,000		35
Metropolitan Coal	100			
New Almaden (quicksilver)				
New Jersey Zinc	100	1,200,000		160
Pennsylvania Coal	50	3,200,000		63
Quicksilver				
Santa Clara (quicksilver)				
Santa Rita (silver, copper, and lead)				
Sonora Expl. & Mining (silv. & cop.)				
West India Cotton	100	100,000		

MINING STOCKS.

COMPANIES.	Par Value of Shares.	Paid on Shares.	Number of Shares.	Dividends at year.	Market price per sh.
Acton (copper)	---	2	200,000	---	4
Adventure (copper)	---	---	---	---	---
Albany and Boston (copper)	---	11	10,000	---	13
American and Mexican Silver	---	---	---	---	---
Aigamah (copper)	---	---	---	---	---
Arizona (copper)	---	100	10,000	---	2
Aztec (copper)	---	---	---	---	---
Balt. and N. Carolina (copper)	---	5	20,000	---	5
Bay State (copper)	---	---	---	---	---
Bedford (copper)	---	---	---	---	---
Black River (copper)	---	---	---	---	---
Bohemian (copper)	---	7	20,000	---	50
Bucks County (lead)	---	---	---	---	---
Cambridge (copper)	---	5	20,000	---	1
Caledonia (copper)	---	---	---	---	---
Canada (copper)	---	4	900	---	10
Carp Lake (copper)	---	---	---	---	---
Cascade (copper)	---	---	---	---	---
Central (copper)	---	5	20,000	---	58
Chaudiere (copper)	---	5	20,000	---	3
Columbia (copper)	---	4	20,000	---	8
Consolidated (copper)	---	5	20,000	---	5
Copake (iron)	---	---	---	---	---
Copper Falls (copper)	---	25	20,000	---	11
Dacotah (copper)	---	---	---	---	---
Dana (copper)	---	---	---	---	---
Doylstown (copper)	---	---	---	---	---
Dudley (copper)	---	---	---	---	---
Eagle River (copper)	---	---	---	---	---
Everett (copper)	---	---	---	---	---
Evergreen Bluff (copper)	---	---	---	---	---

DS.

PASSENGER RAILROAD BONDS

	10	20	30	40	50	60	70	80	90	100
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[illegible]

FEDERAL AND STATE SECURITIES.

DESCRIPTION OF SECURITIES.		Amounts outstanding.	Interest.			DESCRIPTION OF SECURITIES.		Amounts outstanding.	Interest.			
			Rate.	Periods.	WHEN DUE.	Market Price.			Rate.	Periods.	WHEN DUE.	Market Price.
UNITED STATES LOANS.												
Loan of June 25, 1847.....registered		\$9,415,250	6	Jan. & July.	1867	105	Massachusetts-Union Fund Loan.....coupon	3,000,000	6	Jan. & July.	71-76	117
Loan of Dec. 31, 1849.....registered		8,900,342	6	"	1867	105	" " " " " " " " " " " "	600,000	5	"	77-78	117
Texas Indemnity, of Sep. 9, 1850.....coupon		3,461,000	5	"	1868	106	" " " " " " " " " " " "	500,000	5	May & Nov.	1883	143
Loan of June 14, 1858.....registered		20,000,000	5	"	1868	96	" " " " " " " " " " " "	1,000,000	5	"	1883	143
Loan of June 22, 1860.....registered		7,022,000	5	"	1874	98	Michigan-Renewal Loan.....coupon	216,000	6	Jan. & July.	1878	100
Oregon War Debt of June, 1861.....coupon		1,024,600	5	"	1874	98	" " " " " " " " " " " "	100,000	6	"	1879	100
Loan of F. b. 8, 1861.....registered		10,415,000	5	"	1871	96	" " " " " " " " " " " "	597,000	7	"	18-6	104
Loan of July 17, 1861.....registered		59,042,800	6	"	1871	104	" " " " " " " " " " " "	2,000,000	6	"	68-78	104
Loan of Feb. 25, 1862 (5-20s).....registered		40,230,000	6	Yearly.	1881	105	Minnesota-State bonds.....coupon	250,000	8	Jan. & July.	1897	106
Treasury Notes of Feb. & Aug. 1861.....coupon		350,000,000	6	Jan. & July.	1881	108	" " " " " " " " " " " "	100,000	7	"	1871	106
Treasury Notes of 1863 (legal tender).....coupon		52,931,000	6	"	1881	109	" " " " " " " " " " " "	2,275,000	7	"	1883	106
Treasury Notes of 1861 & 1862 (customs).....		86,984,500	6	"	1881	109	Mississippi-State bonds (banks).....coupon	2,000,000	6	"	1883	106
Certificates of Deposit.....(coin)		23,059,295	6	"	1881	109	Missouri-Bank stock Loan of 1857.....	63,000	54	Jan. & July.	1863	106
Certificates of Indebtedness.....(currency)		157,093,241	6	"	1881	109	" " " " " " " " " " " "	199,000	6	"	1863	106
[N.B.—Sinking Fund: 1 percent per annum (in coin) on the aggregate debt. Interest payable in coin. Treasury Notes (except for customs) payable for all public dues.]												
STATE LOANS.												
Alabama-State bonds.....coupon		3,423,000	5	Jan. & July.	1877	105	" " " " " " " " " " " "	100,000	6	April & Oct.	1893	106
Arkansas-State bonds (R. E. Fk).....coupon		899,000	6	"	1865	105	" " " " " " " " " " " "	40,000	6	Jan. & July.	1863	106
" " " " " " " " " " " "		610,000	6	"	1868	106	" " " " " " " " " " " "	200,000	6	"	1883	106
" " " " " " " " " " " "		38,000	5	"	1868	106	" " " " " " " " " " " "	7,000,000	6	"	72-88	67
California-Civil bonds of 1837.....coupon		3,727,500	7.3	Feb. & Aug.	1864	106	" " " " " " " " " " " "	4,000,000	6	"	78-79	82
" " " " " " " " " " " "		198,500	7.3	April & Oct.	1864	106	" " " " " " " " " " " "	3,000,000	6	"	73-87	82
Connecticut-War Fund bonds.....coupon		610,000	6	"	1863	106	" " " " " " " " " " " "	4,380,000	6	"	72-87	82
" " " " " " " " " " " "		2,000,000	6	"	1872	107	" " " " " " " " " " " "	3,501,000	6	"	73-88	82
Florida-State bonds.....coupon		143,000	6	Jan. & July.	1871-72	107	" " " " " " " " " " " "	650,000	6	"	87-89	82
Georgia-State bonds (R. R. & Fk).....coupon		72,000	6	"	1883	107	" " " " " " " " " " " "	700,000	9	June & Dec.	64-66	107
" " " " " " " " " " " "		2,073,750	7	"	1883	107	" " " " " " " " " " " "	635,100	6	Feb. & Aug.	1876	107
Illinois-New Int. Impr. stock.....inscribed		1,970,967	5	Jan. & July.	1872	107	" " " " " " " " " " " "	95,000	6	Jan. & July.	Var.	107
" " " " " " " " " " " "		1,322,085	6	"	1872	107	" " " " " " " " " " " "	531,820	6	"	65-71	107
" " " " " " " " " " " "		737,222	6	"	1870	102	" " " " " " " " " " " "	200,000	6	"	1871	107
" " " " " " " " " " " "		2,187,000	6	"	1870	102	" " " " " " " " " " " "	561,500	5	Jan. & July.	pleas.	107
" " " " " " " " " " " "		2,000,000	6	"	1870	102	" " " " " " " " " " " "	348,107	5	"	pleas.	107
Indiana-State stock.....registered		5,325,500	5	Jan. & July.	1886	81	" " " " " " " " " " " "	900,000	5	"	1875	107
" " " " " " " " " " " "		2,058,173	24	"	1886	81	" " " " " " " " " " " "	442,961	5	May & Nov.	1888	107
" " " " " " " " " " " "		391,000	6	"	1886	81	" " " " " " " " " " " "	1,189,781	6	Jan. & July.	pleas.	107
" " " " " " " " " " " "		1,371,780	6	May & Nov.	1881	98	" " " " " " " " " " " "	1,300,000	6	"	68-78	115
" " " " " " " " " " " "		4,079,500	5	Jan. & July.	1882	82	" " " " " " " " " " " "	700,000	7	"	1870	113
" " " " " " " " " " " "		1,214,737	5	"	1882	82	" " " " " " " " " " " "	28,698	54	"	d'm'd.	113
" " " " " " " " " " " "		1,213,000	5	"	1882	82	" " " " " " " " " " " "	11,050	6	"	d'm'd.	113
" " " " " " " " " " " "		479,545	5	"	1882	82	" " " " " " " " " " " "	14,230	6	"	d'm'd.	113
Iowa-State stocks.....coupon		2,000,000	7	Jan. & July.	1863	80	" " " " " " " " " " " "	421,000	44	Jan. & July.	65-67	113
" " " " " " " " " " " "		800,000	10	"	1883	80	" " " " " " " " " " " "	287,700	5	J. A. J. & O.	1884	113
" " " " " " " " " " " "		122,235	7	Annually.	d'm'd.	80	" " " " " " " " " " " "	68,000	54	Feb. & Aug.	1876	113
Kansas-State bonds (sinking fund).....coupon		146,000	7	Jan. & July.	1876	82	" " " " " " " " " " " "	28,000	54	J. A. J. & O.	1885	113
" " " " " " " " " " " "		54,000	7	May & Nov.	1878	82	" " " " " " " " " " " "	320,000	54	Jan. & July.	1867	113
" " " " " " " " " " " "		65,000	6	July.	1883	82	" " " " " " " " " " " "	100,000	5	"	63-74	105
Kentucky-State bonds.....coupon		4,800,000	5	Jan. & July.	1876-77	104	" " " " " " " " " " " "	6,927,774	6	"	64-78	115
" " " " " " " " " " " "		600,000	5	"	1891	104	" " " " " " " " " " " "	15,889,025	7	"	1864	115
" " " " " " " " " " " "		67,500	5	"	1891	104	" " " " " " " " " " " "	1,000,000	6	"	1864	115
" " " " " " " " " " " "		2,000,000	5	"	1891	104	" " " " " " " " " " " "	9,129,605	6	Various.	Var.	115
Louisiana-State bonds (R. R. etc.).....coupon		516,130	6	"	1871	104	" " " " " " " " " " " "	1,034,605	6	Jan. & July.	1860	115
" " " " " " " " " " " "		3,902,000	6	"	1871	104	" " " " " " " " " " " "	1,015,000	6	"	1865	86
" " " " " " " " " " " "		5,398,533	6	"	1871	104	" " " " " " " " " " " "	379,866	6	"	1868	86
" " " " " " " " " " " "		670,000	6	"	1871	104	" " " " " " " " " " " "	2,183,532	6	"	1870	103
Maine-State bonds.....coupon		1,000,000	6	Mar. & Sept.	1877-78	105	" " " " " " " " " " " "	1,600,000	6	"	1875	104
" " " " " " " " " " " "		816,000	6	Jan. & July.	1885	106	" " " " " " " " " " " "	4,086,309	6	"	1881	108
" " " " " " " " " " " "		200,376	5	"	1885	106	" " " " " " " " " " " "	2,400,000	6	"	1886	108
" " " " " " " " " " " "		5,585,555	5	"	1885	106	" " " " " " " " " " " "	275,385	6	"	1883	108
" " " " " " " " " " " "		2,490,569	5	"	1885	106	" " " " " " " " " " " "	299,704	6	"	1886	108
" " " " " " " " " " " "		500,000	3	"	1889	108	" " " " " " " " " " " "	280,999	6	"	1886	108
" " " " " " " " " " " "		10,000	4	"	1889	108	" " " " " " " " " " " "	2,920,403	6	Yearly.	1868	108
" " " " " " " " " " " "		757,500	4	"	1889	108	" " " " " " " " " " " "	55,372	44	April & Oct.	due.	108
" " " " " " " " " " " "		399,408	5	"	1889	108	" " " " " " " " " " " "	131,200	6	Jan. & July.	due.	99
" " " " " " " " " " " "		148,711	5	"	1889	108	" " " " " " " " " " " "	10,780,095	6	Feb. & Aug.	due.	99
" " " " " " " " " " " "		133,689	5	"	1889	108	" " " " " " " " " " " "	3,886,070	5	Mar. & Sept.	due.	103
" " " " " " " " " " " "		3,030,000	6	"	1889	108	" " " " " " " " " " " "	3,690,614	6	June & Dec.	due.	103
" " " " " " " " " " " "		85,000	6	"	1889	108	" " " " " " " " " " " "	3,241,898	6	Feb. & Aug.	due.	103
" " " " " " " " " " " "		608,333	6	"	1889	108	" " " " " " " " " " " "	210,293	6	Jan. & July.	1882	107
Massachusetts-State b'ds (Western R.R.).....sig.		3,995,555	6	April & Oct.	1888-71	112	" " " " " " " " " " " "	1,177,860	5	"	1-64	107
" " " " " " " " " " " "		508,280	6	"	1888-71	112	" " " " " " " " " " " "	675,029	5	Feb. & Aug.	1861	107
" " " " " " " " " " " "		416,500	6	"	1888-71	112	" " " " " " " " " " " "	1,045,629	5	June & Dec.	1884	107
" " " " " " " " " " " "		300,000	6	"	1888-71	112	" " " " " " " " " " " "	1,558,673	5	Jan. & July.	1885	107
" " " " " " " " " " " "		600,000	6	Jan. & July.	1870-71	117	" " " " " " " " " " " "	2,277,755	5	"	1868	107
" " " " " " " " " " " "		400,000	6	"	1870	117	" " " " " " " " " " " "	1,768,214	5	"	1870	100
" " " " " " " " " " " "		150,000	6	"	1870	117	" " " " " " " " " " " "	4,860,000	5	Feb. & Aug.	1877	103
" " " " " " " " " " " "		200,000	6	June & Dec.	1873-77	117	" " " " " " " " " " " "	428,000	5	"	1878	103
" " " " " " " " " " " "		345,000	6	April & Oct.	1873-77	117	" " " " " " " " " " " "	400,000	6	April & Oct.	1879	103
" " " " " " " " " " " "		200,000	6	May & Nov.	1873-77	117	" " " " " " " " " " " "	650,000	5	Jan. & July.	1882	103
" " " " " " " " " " " "		94,000	6	Jan. & July.	1874	117	" " " " " " " " " " " "	360,937	5	"	1882	103
" " " " " " " " " " " "		200,000	6	"	1874	117	" " " " " " " " " " " "	97,360	6	Feb. & Aug.	1871	103
" " " " " " " " " " " "		247,000	6	June & Dec.	1873-77	117	" " " " " " " " " " " "	3,000,000	6	Mar. & Sept.	1882	103
" " " " " " " " " " " "		55,000	6	"	1873-77	117	" " " " " " " " " " " "	2,000,000	6	"	1883	103
							Rhode Island-State bonds (war loan).....coupon	484,444	5	"	68-90	103
							" " " " " " " " " " " "	1,708,017	6	"	1877	103
							" " " " " " " " " " " "	1,310,000	6	"	1882	59
							Tennessee-State bonds (banks).....coupon	1,125,000	6	"	Var.	60
							" " " " " " " " " " " "	2,063,606	5	"	1890	60
							" " " " " " " " " " " "	12,799,000	6	"	1890	60
							" " " " " " " " " " " "	608,000	5	"	1890	60
							" " " " " " " " " " " "	48,000	6	"	1890	60
							Texas-Had no debt in 1861.....	175,000	6	"	63-64	60

Labor and Capital.

There is a class of men whose mental vision is always colored by their interests. If their generosity is not overmatched in intensity by selfishness, yet spending most of their time in securing for themselves the comforts of life, they are longer under the influence of those feelings which tend to individual aggrandisement, than they are under those which arise from looking to the wants of others, and assisting in promoting the prosperity of the whole. They consequently see but one-half of the truth, and that half is limited to what happens to be the extent of their individual experiences. Thus we find capitalists who are forever dwelling upon the benefit which the employment of their funds confers upon the individual employee, or laborer, and upon the country at large, and leaving entirely out of view the fact that without the laborers capital itself would be worthless. On the other hand, we find employees who look upon capital as their natural enemy, forgetting that without capital they would be in a still worse condition.

In an important sense, and in a manner more readily apprehended because more immediate in its effect upon the great masses of mankind, capital and labor are antagonistic. But in another, and a far more important sense, capital and labor are mutually beneficial; they are and ought to be fast friends.

Were we to entirely divorce the two, capital could find no employment, it could earn no interest or dividends, but would lie unemployed in the hands of the holder; while labor, thus left without the power of organization could only supply its thousand wants by the wholly inadequate efforts of its individual hands.

It is the legitimate province of capital to earn to itself interest. For this purpose it is the duty of the capitalist to look about and find the safest and the most lucrative business in which to invest his money. If money is plenty, competition will tend to lessen its value, and the result will be shown by a reduction in the rate of interest, or the sum which people are willing to pay for the loan of its use. If, however, it is scarce the contrary result will follow. It is the right also of the capitalist to make the best use of his money which legitimate business operations will afford, and if in doing this he finds it desirable to divert his money from one branch of trade to another, the employees engaged in the comparatively unprofitable trade cannot justly complain. Such employees may be sufferers thereby, but that the community at large will be gainers is proved by the fact, that they are willing to pay more for the money employed in the new or different business. So too the capitalist has the right to make the best possible use of his money, by employing the cheapest labor the market affords. If a man possessing a limited capital is obliged to pay his business employees three dollars per day, instead of one dollar and a half per day, it is quite evident that he would be able to do but one half the amount of business which he could do at the cheaper rate, and of course the return of money for his investment would be proportionately less. It is therefore right for him to come into the labor market and accept the services of the lowest bidders. In this manner labor and capital are antagonistic, and this is the only view which many (we will not include the mass of American workmen because we

believe that these are too intelligent) employees take of the subject. But even this antagonism is not without its compensating benefit. If the employer pays his laborer higher wages, he must increase the price of his goods an equal amount, and when this universally takes place all prices increase, and the laborer with his increased wages buys no more of the necessities of life than he formerly did with his lesser wages. Hence while the employer resists the increase of wages, he is at the same time helping to keep down the prices of all of the commodities which are bought and sold in the community. He may be and usually is governed entirely by selfish motives, but this does not change the beneficial effect of his action.

But the laborer also has the right to demand for himself the best remuneration which he can obtain for his services in the general market. He may leave one employer and go to another, as often as he finds the change beneficial. By this means he makes use of the competition of capitalists to obtain his just dues. The amount of pay he gets is limited by profits which, on the average, accrues in the particular line of business in which he is engaged, and not by the cupidity of the employer or capitalist. Whether laborers or employees have the moral right to band themselves together, and to demand an increase of wages upon condition of resuming work, is questionable if not wholly unjustifiable. Such action can only be defended on the ground that employees are the weaker parties to the contract, and that a union of their strength is necessary in order to make labor equal in the struggle to capital. There may be occasions when such a course is justifiable; as for instance, when a branch of trade is monopolized by a few wealthy men, and the profits earned by the capital invested is proportionately greater than the profits paid to the employees under the name of wages. But as a general rule such organizations are injurious both to the actors and the public; and are no more justifiable than would be a combination of capitalists for the purpose of starving workmen into a willingness to work for lower wages.

The demand for an increase of wages which is now so universal throughout the country is the natural result of the war and the issue of Paper Money. The drain of men to fill the ranks of the union army has rendered laborers more scarce, and consequently the services of those remaining is more valuable. The issue of paper money has made the currency of the country cheaper than formerly; and while an increase of wages is justly due to the laborer in order to make his increase simply equal to what it formerly was, it also tends to absorb the currency and to properly adjust the relative value of all articles of trade in the community.

The Boston and Maine Railway Company has leased the Cochecho Road for a term of years. This arrangement puts an end to the projected road between Dover and Portsmouth, for which a charter was obtained at the last session of the Legislature. The Boston and Maine hires the Dover and Winnepisseogee for fifty years, paying annually \$29,000 for its use, and buying all its rolling stock. This will give the bondholders of the latter 6 per cent. The steamer Dover is included in part of this arrangement, the Boston and Maine taking the interest which the Dover and

Winnepisseogee Road owned in the boat, which was about \$12,000.

Rights of Carriers.--Duties of Consignors. CONSIGNORS BOUND TO INFORM CARRIERS OF THE NATURE OF DANGEROUS ARTICLES SHIPPED BY THEM.

The law concerning common carriers consists for the most part of rules prescribing the duties and liabilities of the carrier, but there are certain duties imposed upon the consignor, which are of great importance, though not of so frequent application. Among these duties may specially be noticed the obligation resting upon the shipper of a dangerous article to inform the carrier of its nature, so that he may take the proper precautions against accident. The justice of such a rule is manifest, but the rule itself has seldom been so fully set forth as law, and so well illustrated, as in the late case of Farrant against Barnes, in the English Court of Common Pleas.

This was an action brought by the plaintiff to recover damages for an injury sustained by him from the insufficient packing of a carboy of nitric acid which he was employed to carry for the defendant.

The cause was tried before BLACKBURN, J., at the Summer Assizes at Croydon. It appeared from the plaintiff's evidence that he and his father were in the employ of one Russell, a carrier between London and Croydon; that it was part of the plaintiff's duty to collect goods in the city, and to convey them in a van to the Elephant and Castle at Newington, where he transferred the goods he had collected to a cart, in which they were conveyed to Croydon; that on the 1st of May, 1861, whilst going his round, he met in Cannon street, in the city, one Rayner, a carman in the employ of one Pescott, a railway carrier, who asked him if he would take a carboy, (which he told him contained "acid" without more,) and a bottle for, Croydon; and upon his agreeing to do so Russell brought them and placed them in the plaintiff's van, the carboy being a glass bottle encased in wicker work, weighing a little over 1 cwt., and having attached to its neck a wooden label, on which was written, "Mr. Waterman, dyer, Croydon. Acid;" that he proceeded with his van containing these and various other goods to the Elephant and Castle, at a foot pace; that on his arrival there the other goods having first been taken out, his father removed the carboy from the front to the tail of the van, and put it upon the plaintiff's shoulder; that as he walked with it towards the Croydon cart part of the contents (which proved to be nitric acid,) escaped, and flying over the plaintiff burned him so severely that he was unable to resume his employment for more than a month, and was still not perfectly cured; that the carboy appeared to be sound when he received it from Rayner; that it received no injury whilst in the van; that he never saw any label on it except the one containing the direction; and that he did not know the contents to be dangerous, and would not have taken it if he had known the fact.

The plaintiff's evidence was corroborated with respect to what passed, when Rayner delivered the carboy to him, by that of his father, and as to what occurred at the Elephant and Castle, by the evidence of his father and two other witnesses, Rayner who was called as a witness for the

plaintiff, stated that being at the warehouse of the defendant, who is a dry salter in Lawrence, Pountney Lane, on the day in question, he was asked by the foreman if he could take a carboy and bottle of acid to Croydon; that he told him he could not, as articles of that description were only carried by the railways on Mondays, (when special provision was made for the carriage of dangerous articles;) that the foreman saying he particularly wished it to go, he (Rayner,) asked the plaintiff if he could take it, and on his assenting went back and told the foreman, who then gave him the carboy, which he carried on his back to the plaintiff's van; that he (Rayner,) knew that it was acid and dangerous, but not that it was nitric acid; and that he told the plaintiff to be careful of it.

It was submitted on the part of the defendant, that there was no case to go to the jury, inasmuch as there was no privity between him and the plaintiff. But the learned judge declining to stop the case, the defendant's foreman was called. He stated that the carboy was securely packed by himself in the usual way; that the bottle was sound; and that it had on it besides the address of the consignee another label, (that of the manufacturer,) which stated what the vessel contained, and which was tied to the handle of the carboy. The witness was corroborated as to this latter fact, by a man who was with Rayner at the time he received the carboy at the defendant's warehouse. Upon this it was urged on the part of the plaintiff, that there was evidence from which the jury might assume that Rayner as the defendants agent, fraudulently removed the label which intimated that the carboy contained nitric acid. The learned judge, however, thought there was no evidence to justify him in leaving that question to the jury.

The learned judge then left it to the jury to say—first, whether they thought the defendant took precautions to make the carrier's servants aware that the article they were about to carry were dangerous—secondly, whether the plaintiff was in fact ignorant that it was dangerous; and if so, whether that arose from want of reasonable prudence and skill on his part—thirdly, whether it was made out to their satisfaction that the accident occurred from the acid being improperly packed unknown to the plaintiff: telling them that they were not to say that the accident arose from bad packing, unless affirmatively satisfied that it was so—fourthly, what amount of compensation the plaintiff was entitled to for the injury he had sustained.

The jury answered the first question in the negative; as to the second, they found that the plaintiff was in fact ignorant, but not from want of reasonable prudence and skill on his part; and as to the third, that it was not proved that the accident occurred from the acid being improperly packed; and they assessed the damages at 50*l*.

Pursuant to a previous arrangement with the respective counsel, a non-suit was entered; leave being reserved to the plaintiff to move to enter a verdict for 50*l*. on the findings of the jury, if on those and the evidence the court should be of opinion that there was a cause of action for the plaintiff; the court to have all the powers of amendment which the judge had.

ERLE, C. J.—The facts of the case are these: The defendant wishing to have a dangerous article, a carboy of nitric acid conveyed to Croydon, his foreman asked one Rayner, a carman in the employ of a railway carrier to forward it. Being unable in consequence of the company's regulations to forward it by railway in time to answer the defendants purpose, Rayner applied to the plaintiff, the servant of one Russell, a Croydon carrier to take it for him. And thus the carboy was in effect delivered by the defendant to the plaintiff to be carried to Croydon according to his accustomed course of business. The application to the plaintiff being an application to take charge of, and to carry and deliver a dangerous article, it was the duty of the defendant who knew the danger to take care that the dangerous character of the article should be made known to all persons who were to be concerned in the carriage of it. The jury have found that he did not do so. There was no evidence as to how the accident occurred; probably it was from the explosive nature of the article. But, be that as it may, if notice had been given of the dangerous character of the article, greater precaution might possibly have been used in the handling of it. I think the plaintiff is brought into such direct contact with the defendant, that the distinction relied on to take the case out of the principle upon which the decision in *Langridge vs. Levy*, (4 M. & W. 337,) proceeded fails. The defendant knowing the dangerous character of the article, and omitting to give notice of it to the plaintiff, so that he might exercise his discretion as to whether he would take it or not, was guilty of a clear breach of duty. The case, however, upon which I rely is *Brass vs. Maitland*, (6 Ellis & B. 470.) There the defendants caused a dangerous substance to be put on board the plaintiff's ship, as bleaching powder, without giving him any notice of its dangerous qualities; and by reason of the insufficiency of the casks in which the article was contained, the contents escaped and damaged the rest of the cargo; and it was held by Lord Campbell and Wightman J., that there is an implied undertaking on the part of shippers of goods on board a general ship, that they will not deliver to be carried on the voyage packages of a dangerous nature, which those employed on behalf of the ship owner may not on inspection be reasonably expected to know to be of a dangerous nature, without giving notice.

The present case, even falls within the principle there laid down by Crompton J., who held the liability to be more limited. Lord Campbell says, in giving the judgment of himself and Wightman J., that "where the owners of a general ship undertake that they will receive goods and safely carry them and deliver them at the destined port, I am of opinion that the shippers undertake that they will not deliver to be carried on the voyage packages of goods of a dangerous nature, which those employed on behalf of the ship owner may not on inspection be reasonably expected to know to be of a dangerous character, without expressly giving notice that they are of a dangerous character." Crompton J., says: "Probably an engagement or duty may be implied, that the shipper will use and take due and proper care and diligence not to deliver goods apparently safe, but really dangerous, without giving notice thereof;

and any want of care in the course of the shipment, in not communicating what he ought to communicate, might be negligence for which he would be liable; but where no negligence is alleged, or where the plea negatives any alleged negligence, I doubt extremely whether any right of action can exist." Here it is expressly found by the jury that the defendant took no precaution to inform the plaintiff of the dangerous nature of the article in question when he intrusted it to him to carry. It seems to me that the principle on which the decision of *Brass vs. Maitland* is founded, taking it in the narrowest and most limited way, authorizes us to say that the defendant in this case is responsible for the injury which the plaintiff has sustained, and that consequently the verdict must be entered for the latter, for the amount of damages assessed by the jury.

WILLES, J.—I am of the same opinion. I apprehend that as matter of legal duty a person who gives another dangerous goods to carry, goods which require more care and caution than ordinary merchandize, and which are likely in the absence of such caution to injure persons handling them, is bound to give notice of their dangerous character to the party employed to carry them, and is liable for the consequences which are likely to ensue from the omission to give such notice. A simple instance of this, is the case of a merchant putting on board a ship, goods which are liable under certain circumstances to spontaneous combustion, or which in the absence of extraordinary care, are likely by escaping to damage other parts of the cargo. It is clear that such a person would be liable to an action at the suit of any one who might be injured by his wrongful omission. This doctrine though more fully considered in the recent case of *Brass vs. Maitland*, (6 Ellis & B. 470,) is by no means modern. It was considered in *Williams vs. the East India Company*, (3 East, 192.) The plaintiff there failed in the result for want of proof, that the goods were put on board without due notice of their dangerous character; but the court treat the obligation of the shipper as not resting upon contract, but upon the duty to give notice. Lord Ellenborough says: "In order to make the putting on board wrongful, the defendants must be conscious of the dangerous quality of the article put on board; and if being so they yet give no notice, considering the probable danger thereby occasioned to the lives of those on board, it amounts to a species of delinquency in the persons concerned in so putting such dangerous articles on board, for which they are criminally liable and punishable, as for a misdemeanor at least." The court there treat it as a duty which is owed to all persons who may be injured by the neglect to give notice. What is there laid down may not so far as the supposed criminal responsibility goes, be applicable to a case like this; but it clearly shows that there would be a civil responsibility for the non-performance of this duty by the defendant or his agent.

The case of a shipment of dangerous goods may be an extreme case; but it serves to illustrate the general principle, that wherever a person employs another to carry an article which from its dangerous character requires more than ordinary care, he must give him reasonable notice of the nature of the article, and that if he fails to do so he is responsible for the probable consequences

of his neglect. The only remaining question then here is whether the injury of which the plaintiff complains, was the probable result of the want of notice. The plaintiff was injured whilst carrying this carboy of nitric acid in the way in which goods of the like bulk are ordinarily carried, viz., on the shoulder. If he had known the nature of the article it is extremely improbable that he would have carried it in that manner. When, therefore we take into account the fact that the plaintiff was the servant of the carrier, and that the carboy was delivered to him to be carried in the ordinary way, it would seem to be a waste of words to argue that the injury was the result of the defendant's omission to give notice.

KEATING, J.—I am of the same opinion. It is clear that persons sending dangerous articles by a carrier, are bound to give notice of their character. I did not understand Mr. Archibald to contend that there was no duty to give such notice, but that the duty was confined to giving notice to the person employed to carry them, and did not extend to his servants. Without defining the extent to which the duty of the defendant ought to go, I entertain no doubt that it goes to the extent of including the case of the present plaintiff. He was the person to whom the defendant caused the article to be delivered for the purpose of being carried. The defendant knew he was employed to carry and deliver it.

Judgment was accordingly entered for the plaintiff.

Grand Trunk Railway of Canada.—An English View.

The prosperity and progress of a country is so immediately dependent upon the condition of its communications, that we may almost venture to test the condition of a population by the condition of their railways. In this point of view the Report of the Grand Trunk Railway of Canada, recently presented to the bond and shareholders at their general meeting at the London Tavern, would afford a favorable impression of the improvement of Canada. After almost unparalleled depression, the Grand Trunk is beginning to recover itself. Its traffic, though still much below what it ought to be, is steadily increasing, showing, we hope, a corresponding improvement in the condition of the province.

There are few territories to which a railroad promised more advantage. Canada is a new country, and the first want of a new country is a road. Canada is an agricultural country, and the first requirement of an agricultural population is access to a market. Canada, moreover, labors under a peculiar physical disadvantage; for nearly six months in every year the country is 'snowed up.' The broad and rapid river St. Lawrence, which forms the natural mode of communication between all parts of Canada and the seaboard, is congealed throughout its course during half of every year. Before the formation of railroads commerce in Canada was therefore, restricted to the summer months. Between November and April transport was impossible, and even ordinary intercourse was not unattended with difficulty, for a sleighing excursion of 180 miles, between two such cities as Quebec and Montreal, was an achievement not to be accomplished in a Canadian winter without some danger, and at any rate considerable cost. The opening of the Grand Trunk Railway and of the Victoria-bridge across the St. Lawrence may, therefore, almost be said to have added six months in every year to Canadian existence.

Few railways were ever ushered into existence under apparently brighter auspices than the Grand Trunk. It was in April, 1853, that its first prospectus was issued to the British public with the authority of the highest names in Canada, associated with those of the greatest of our London

merchants. The line itself was proposed as "a comprehensive system, protected from the possibility of competition as well by natural causes as by legislative enactment." It would, it was said, engross the traffic of a district more than 1,100 miles in length, extending in one direct line from Lake Huron, through the Canadas, to Portland in the State of Maine, and ultimately to St. Johns in New Brunswick, and Halifax in Nova Scotia. Commencing at the debouchure of the three largest lakes in the world, Lake Superior, Lake Michigan, and Lake Huron, it was calculated that the accumulated traffic of the rapidly increasing West would pour itself by the railway, in one unbroken line throughout the length of Canada, into the St. Lawrence at Montreal and Quebec, and into the ocean, at Portland, St. Johns, and Halifax.

Financially the scheme of the Grand Trunk was not less promising. A capital of £9,500,000 was asked for to purchase and construct 1,112 miles, including the largest engineering work in the world, the Great Victoria Bridge at Montreal. Of the total capital, £3,000,000, or nearly one third, was subscribed in the province, partly by the legislature and partly by private capitalists. It was estimated that the line, when completed, would produce above £25 per mile per week; that its working expenses would average 40 per cent., and that there would be "a profit on the share capital of nearly 11½ per cent."

How has it happened that calculations founded on such a basis, supported by such authorities, and entrenched (as it were) by such important influences, have been throughout, so grievously disappointed? The latest Grand Railway meeting reveals something, but to elucidate the whole facts we have to look further back and to trace the position of the railway from the beginning of the enterprise.

In the first place, it is necessary to dispel misconceptions. The non-success of the Grand Trunk Railway has been attributed to various causes. It has been said that the line was expensively constructed. It does not appear that anything of the sort was the case. If we look at the cost of the various great lines of the world we shall find few instances in which a railroad has been made so cheap. Taking the whole expenditure upon the line, including the permanent way, stations, rolling stock, and all the accessories of a railway, the Grand Trunk appears to have been handed over to its proprietary at a price little exceeding £10,000 per mile, a sum remarkably small considering the cost of constructing a railway which may almost be said to have been made in England and exported to America. This amount is exclusive of the cost of the Victoria Bridge. It has been urged that the cost of that bridge has been the greatest burden on this railway. But without the Victoria Bridge the railway would have been a merely local and most imperfect line. Canada would have been an isolated territory north of the St. Lawrence, without communication with the United States, and consequently cut off from a great market for its produce. The Victoria Bridge, which cost £1,400,000 in its construction, is emphatically the key of the Grand Trunk railway communication; and there can be no doubt that, constructed as it is on the most permanent basis, it will ultimately be found to be the most lucrative portion of the system, as well as the cheapest to maintain. The Grand Trunk was especially devised for the carriage of all the produce of the great Western territory. Here there has been a dreadful disappointment, arising partly from the incompleteness of the line, and partly from the effects of competition. At the time the Grand Trunk was proposed the canal system of Canada was very perfect. The water carriage of heavy commodities by canal and river can always be carried on at very moderate rates of charge, and all experience testifies that it is one of the most difficult classes of traffic to divert. So long as the canals and rivers are open, therefore, the Grand Trunk has always found itself exposed to a competition along its whole route by steamboats, &c.—a competition not limited to corn and merchandise, but even extending itself in

summer weather to the passenger traffic of the country.

Nor was this all. The Canadian canals were always opposed to American competition; and, indeed, one great object of the colonists in promoting the Grand Trunk was to defeat that competition. But, pending the period between 1853, when the Grand Trunk was first proposed, and 1859, when the Victoria Bridge across the St. Lawrence was opened for traffic, an immense development took place upon the shores of the Western lakes, and a corresponding railway system was opened up in the United States. The town of Chicago, at the bottom of Lake Michigan, became the great grain depot for the new and rapidly increasing Western States of Wisconsin, Minnesota, Iowa, Illinois, and Michigan. Towards the city of Chicago railways were constructed by the dozen. The most important of them pointed directly across the territory of the United States towards New York. And New York, as everybody knows, is the great market of North America. Now, as a rule, produce will find its way to the market where there are the most purchasers. The produce of these States accordingly found its way direct to New York, instead of along the route of the Grand Trunk; and hence the Grand Trunk of Canada, instead of receiving almost the entire grain traffic of the West at Port Sarnia, as had been anticipated, found itself exposed to a most violent competition at its western extremity with American and other lines, compelling it to make competing rates for the carriage of produce, which proved anything but profitable.

Cut off from access to British seaports at one end, and exposed to American competition at the other, the Grand Trunk became dependent upon the internal trade of Canada. Now, for some years after the formation of the company, Canada, unfortunately, was not in thriving circumstances. In 1854, 1855 and 1856 the war in Europe checked emigration. In 1857, 1858 and 1859 Canada experienced three successively bad harvests. These were accompanied and followed by financial embarrassments, which operated disastrously on the fiscal resources of the railway. The line itself, moreover, was incomplete as a means of transit, until the Victoria Bridge was fairly opened for traffic, which was not until the autumn of 1859. The consequence was that the traffic of the Grand Trunk presented lamentable deficiencies. It had been estimated to produce £25 per mile per week, but in January, 1859, with 880 miles of railway open, the line only produced £3 6s per mile per week; and the working expenses at that period had risen to 80 per cent. of the gross receipts.

The consequence was a great period of disaster. The income of the line was insufficient to defray even the interest on the debenture debt of the company. Great expenditure also had been and was being incurred. In order to meet the competition of the American and other lines it had been found necessary to make arrangements, at very great cost, and to carry the line beyond its original boundary. All this added to capital. The £9,500,000 was increased to £14,000,000, and as there was nothing for the shareholders, great complaints arose. The aspect of affairs attained its worst in 1860. The line was then dreadfully involved in debt, and did not pay its way. Its working stock was threatened with seizure. Its shareholders of various descriptions were quarrelling for their respective rights. Help was sought from a variety of quarters; amongst others, from the Canadian Legislature. None could be obtained. This state of things led to criminations and recriminations of the worst character. The capitalists concerned in the railway were assailed not only by interested parties in the colony, but by the shareholders at home. It was necessary, at last, to bring things to a crisis. In 1862 an act of parliament was obtained, called "The Grand Trunk Arrangements Act," which classified and defined the interests of the various stockholders. It commenced by a terrible admission:

"Whereas the interest of all the bonds of the Grand Trunk Railway of Canada is in arrear, as well as the rent of the railways leased to it; and

the company has become deeply indebted, both in Canada and in England, on simple contract, to various persons and corporations; and several of the creditors have obtained judgment against it, and much litigation is now pending; and whereas the keeping open of the Railway for traffic, which is of the utmost importance to the Province, is thereby imperilled; and whereas the terms of a compromise have been settled, but in order to facilitate and give effect to the same the intervention of the Legislature is necessary; therefore her Majesty, by and with the advice, &c., enacts, &c."

The result of the working of this act was shown at the meeting to which we commenced by referring. Differences have been abated, a great effort has been made to put this important railway on a better footing. The result has been by no means unsatisfactory. With the last year a material reduction has been made in working expenses, and a largely increased revenue has been earned at a diminished cost. The line is now put upon a footing which enables it to pay its way. All its creditors have been arranged with, every judgment debt removed, and the permanent working of the line placed beyond peril. Since the opening of the Victoria Bridge, the traffic also has shown a satisfactory increase. The net revenue of the line has risen as follows:—

	First Half-year.	Second Half-year.	Total.
1859.....	\$20,868	\$52,490	73,358
1860.....	46,001	56,684	102,685
1861.....	46,786	95,708	142,494
1862.....	63,436	106,798	170,234
1863.....	124,173		

This increase shows the extent to which this line is capable of development, if proper means are applied to effect that object. A great work, however, still remains to be done. The Grand Trunk Railway is, even at this day, far from being what it was designed to be. Its communications with the colonies of Great Britain in the East are still incomplete, and its relations with other railways in the West are still by no means satisfactory. We regret that space does not allow us to enter more at large into these considerations. But, at present, we must rest satisfied with this imperfect, though impartial, sketch of the history and position of the Grand Trunk, which we hope hereafter to find increasing in prosperity, contributing to the welfare of the great Province with whose destinies it is so intimately associated, and receiving from colonists of all shades and parties the encouragement and support which so great a work deserves.—*London Daily News.*

Telegraph to India.

England has determined upon a most gigantic enterprise, no less than the connection of her soil by telegraph with the most remote corners of her Indian empire. The vessels which convey the last links in the great cable have just sailed from England. The route to be followed by the line of telegraph is thus described by the *London Times*:

"The five stations will be from Kurrachee to Gwadel, a distance of two hundred and fifty miles, from Gwadel across the Gulf to the peninsula of Khasab, from Khasab to Bushire, and from Bushire to a place called Faw, a small eastern township on the estuary at the mouth of the Euphrates, where the submarine wire meets the land lines which carry it to Bagdad, thence to Mosul, (the ancient Nineveh,) thence to Diarbekir, and thence to Scutari, on the Bosphorus, where it joins a dozen European land routes."

The line will probably be laid next February. The *Times* apprehends that there will be trouble on the land part of the line, extending from the Gulf to Scutari, as a part of the country is in the hands of the Arabs, and the line from Bagdad to Scutari is worked by Turkish operators, who work only when they feel like working. To escape the Arabs another land line is nearly or quite completed from Bushire to Teheran, and from Teheran

to Bagdad, and to check the Turks, a line will be completed from Teheran via Tiflis, connecting with the Russian lines.

Progress in Wool Growing in Minnesota.

It is calculated that the wool clip of Minnesota the present year will not be less than 500,000 lbs. From 2,000 to 5,000 are shipped below from our levee daily. The progress in wool growing in Minnesota has been so unprecedented and gratifying, that it shows we are approaching a time when the wool trade of our State will be one of its chief sources of wealth. Commencing in 1850, our progress toward this is as follows:

	No. Sheep.	Clipped lbs.
1850.....	80	800
1859.....	4,000	7,000
1860.....	2,595	19,306
1861.....	25,000	75,000
1863.....	175,000	500,000

There is no wool growing State in the Union which can show such a sudden increase in its whole clip or flocks as Minnesota, and yet our farmers have scarcely begun to get under way in their wool growing operations. By the time our State census is taken in 1863, our flocks will have increased to 500,000, and our wool clip to 2,000,000 lbs.

Three or four years ago, a few grain sacks held the entire wool clip of the State. Now it has become a department of trade, and a large item (at present prices) in our exports.

Vermont grown wool is now the finest in the world, having taken the first prize at the Hamburg Fair, in competition with European Saxony fleeces. It is a gratifying fact that most of our Minnesota blooded sheep are of Vermont Merino stock, and have actually improved by the emigration. Our pure blood sheep can, therefore, safely challenge those of any part of the world to bear finer wool or heavier fleeces.

Charles Hoag, of Diamond Lake, Hennepin County, who has some fine flocks of Southdowns and Merinos, has sent a large quantity of wool to Milton, Indiana, to be manufactured into cloth, and returned to him. He has reason to believe that he can induce the manufacturer to locate himself at the Falls, and start a manufactory of fine woollens.—*St. Paul Press.*

New York City and County Loans.

LOANS OF THE COUNTY OF NEW YORK.

1. *Riot Damages Indemnity Bonds*.—For the payment of damages for which the county became liable under the provisions of chapter 428 of the Laws 1855, in consequence of the proceedings of the mob during the riots in July last:

Amount authorized.....	\$1,000,000 00
Amount heretofore issued.....	426,000 00

Balance to be issued from time to time, as the money is required for the payment of claims for damages \$574,000 00

These bonds are redeemable on the 1st day of August, 1864, and bear interest at the rate of six per cent. per annum.

2. *Soldiers' Substitutes Bounty Fund Bonds*.—For the procurement of substitutes for drafted soldiers, &c.:

Amount authorized.....	\$2,000,090 00
Amount subscribed for.....	48,300 00

Balance.....\$1,951,700 00

These bonds are redeemable on the 1st day of June, 1864, and bear interest at 6 per cent. per annum. The loan will, without doubt, be duly legalized at the next session of the Legislature, and provision will be made at the same for funding the amount.

3. *The New York County Court-house Stock*.—This stock was authorized by chapter 167 of the Laws of 1862, and by an ordinance of the Board of Supervisors, passed April 18, 1862. The amount limited by the act is \$1,000,000, of which the sum

of \$700,000 has already been issued. Of the proceeds of the amount issued \$450,000 was paid to the Corporation for the benefit of the Sinking Fund for the redemption of the City debt, and \$250,000 to the erection of the New Court-house in Chambers-street. The remainder of the amount authorized, say \$300,000, is now offered, and will be awarded to the highest bidders (not less than par.) on Saturday, the 28th of November, inst.

This stock bears interest at six per cent., payable half-yearly, (May and November,) and the principal is redeemable in 1875, 1877, 1878 and 1879—the Board of Supervisors being authorized and required to raise the sum of \$100,000 by taxation in each year, commencing in 1875, for that purpose.

LOANS OF THE CITY OF NEW YORK.

There are no loans of the Corporation now in the market. It is probable that \$230,000 of Water Stock will shortly be authorized by the Common Council, that sum having been called for by the Croton Aqueduct Board, and recommended by the Comptroller, to provide means for finishing up the New Grand Reservoir, and the improvements at High Bridge.

This stock will bear interest at five per cent., payable quarter-yearly, and the principal will be redeemable in 1879.

We notice that a proposition for another loan has been introduced in the Board of Aldermen for building water-works at or near Carmansville, and building storage reservoirs in the Croton Valley.

The Corporation loans for war purposes, that is to say, for aiding the families of soldiers from this City, will be continued during the war at the rate of a million and a half or two million dollars per annum. In order to divide the burden, Comptroller BRENNAN procured the enactment of a law last Winter, which provides that not over \$500,000 of said loans shall be made payable in any one year.

A Large Locomotive.

The largest locomotive in the United States, if not in the world, has just been built for the Philadelphia and Reading Railroad Company. It has 12 driving wheels 48 inches in diameter. The cylinder is 20 inches in diameter, and the stroke of piston 26 inches. The fire boxes 10 feet 8 inches long, and 41¾ inches wide. Inside diameter 48 inches. The weight of the locomotive when in running order is 100,820 pounds. This locomotive is intended for a pushing one, to force the heavy coal trains up the grades of the road. It was designed and constructed by Mr. James Milholland, of Reading.

Changing the Current of the Potomac.

Col. Seymour, Engineer-in-Chief of the Aqueduct, has submitted a plan to the Secretary of the Interior for changing the current of the Potomac to the Washington side of the river. It provides for the construction of a breakwater from the lower extremity of Mason's Island, to extend easterly on the flats to the neighborhood of the Long Bridge, midway of the causeway so called. This will give a current of twenty-five to thirty feet along the Washington wharves, which will be of great service to the Government in the matter of transportation.

Building in Philadelphia.

We learn that a very large number of buildings have been erected in Philadelphia the past year, particularly in the Northern and Western sections. In West Philadelphia great improvements have been made in the architectural designs; the fronts are of stone instead of brick; the dwelling houses are large and commodious, and spacious side courts are attached to them. This is a commendable variation from the old style, and will be found of great advantage.

RAILROAD EARNINGS—MONTHLY.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Buffalo, New York and Erie:													
1890	36,633	37,426	49,194	58,881	56,174	45,963	48,417	43,516	51,212	73,432	70,409	78,783	657,070
1891	67,862	59,876	78,266	74,066	67,589	62,167	69,523	51,429	74,034	83,324	84,322	91,398	850,815
1892	100,183	81,130	100,370	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Chicago, Burlington and Quincy:													
1890	104,802	111,889	159,183	178,465	229,081	163,813	154,723	230,022	225,896	241,964	158,566	117,607	2,075,309
1891	149,068	115,525	155,007	131,814	169,100	149,186	169,465	188,478	224,225	226,009	210,494	179,625	2,070,996
1892	187,772	110,054	151,170	159,050	182,588	225,082	220,211	212,812	270,816	304,943	252,934	229,789	2,557,224
1893	242,729	204,587	290,260	306,691	329,000	-----	-----	-----	-----	-----	-----	-----	-----
Chicago and Alton:													
1890	55,734	55,123	71,090	63,995	56,211	76,426	81,453	103,635	94,928	107,758	73,751	64,937	938,641
1891	51,631	75,621	78,361	65,859	75,250	63,761	73,474	136,897	141,174	122,487	104,254	80,296	1,098,464
1892	73,199	53,591	110,935	72,199	81,994	90,925	95,096	128,191	132,639	116,409	115,201	111,955	1,225,001
1893	96,306	107,443	106,816	127,205	140,107	154,617	162,230	167,068	188,939	185,591	-----	-----	-----
Chicago and Rock Island:													
1890	60,058	55,407	68,116	71,792	73,578	72,392	67,070	87,233	120,053	126,060	100,440	82,252	984,577
1891	77,408	66,703	77,408	89,170	104,272	100,403	82,895	139,049	134,500	145,439	92,873	75,457	1,181,008
1892	83,030	63,975	77,007	76,009	102,163	90,621	88,410	130,542	164,084	152,587	123,319	118,753	1,261,050
1893	120,776	90,607	75,676	76,459	102,353	138,373	119,947	117,088	146,268	161,508	138,795	135,595	1,423,438
1894	140,024	130,225	122,512	127,507	144,995	171,766	189,368	151,565	209,391	208,669	-----	-----	-----
Chicago and Northwestern:													
1890	18,569	19,555	22,970	25,881	28,201	28,066	24,326	23,536	51,340	55,831	55,003	42,101	400,459
1891	32,192	33,408	46,340	48,919	62,392	45,985	39,500	49,571	80,819	108,737	74,331	63,554	675,754
1892	48,325	48,651	59,920	60,410	84,891	83,229	76,897	60,527	87,167	105,146	61,295	55,199	855,658
1893	46,605	59,249	54,725	84,706	104,815	95,340	71,306	104,004	124,787	108,956	90,991	99,977	994,677
1894	69,091	81,160	92,483	100,904	107,868	124,233	116,861	106,491	172,072	210,476	-----	-----	-----
Cleveland, Columbus and Cincinnati:													
1890	73,072	72,759	91,520	80,025	82,835	83,397	76,780	92,652	97,614	92,073	80,568	84,926	1,018,900
1891	69,287	70,724	83,965	79,701	85,990	84,956	74,829	118,539	119,487	107,672	80,879	71,402	1,073,422
1892	73,913	67,610	83,392	95,081	96,435	89,028	82,000	106,535	120,793	125,050	140,561	164,916	1,255,060
1893	136,860	110,836	103,352	115,115	113,854	123,465	131,423	173,152	192,174	172,381	165,178	180,063	1,716,843
1894	166,687	152,435	155,000	185,000	-----	-----	-----	-----	-----	-----	-----	-----	-----
Cleveland and Toledo:													
1890	59,856	55,779	75,709	62,294	55,652	62,788	44,781	61,791	72,389	70,673	76,204	82,220	780,236
1891	78,170	67,210	86,260	76,032	65,907	65,035	60,386	66,573	84,603	94,406	82,467	82,400	889,499
1892	85,239	73,918	86,663	90,324	65,302	63,137	62,299	60,285	84,640	98,528	88,401	105,253	955,959
1893	106,263	88,408	108,175	87,915	69,716	61,910	71,716	78,538	102,176	112,507	117,284	104,876	1,107,544
1894	145,916	146,839	166,780	121,278	100,225	100,085	91,308	102,130	132,130	140,013	-----	-----	-----
Erie:													
1890	376,357	328,047	461,495	557,985	473,366	384,379	383,322	389,373	375,250	456,226	438,899	392,293	5,014,092
1891	340,708	319,593	372,296	380,343	349,953	330,657	361,819	359,114	455,235	465,959	536,608	411,764	4,651,049
1892	354,000	345,000	433,311	457,161	393,409	393,409	319,955	477,042	600,124	587,242	561,448	412,723	5,735,424
1893	444,507	391,932	455,560	487,174	506,610	430,063	372,705	419,010	515,948	719,354	734,108	714,211	6,214,182
1894	599,097	638,006	626,070	587,416	528,842	595,024	615,962	756,421	885,136	902,006	963,859	840,334	8,400,334
1895	835,453	829,764	940,041	938,453	838,807	700,568	721,859	678,950	814,828	955,371	-----	-----	-----
Galena and Chicago:													
1890	62,421	69,943	92,921	58,708	122,008	110,656	89,527	119,280	208,803	195,934	123,907	89,244	1,569,441
1891	60,653	62,698	80,793	98,251	115,505	93,449	87,705	166,541	219,529	282,108	142,658	94,800	1,462,762
1892	67,253	76,859	101,600	103,795	165,707	162,823	162,823	150,359	200,276	221,326	172,700	122,309	1,720,396
1893	109,867	105,424	74,346	90,180	178,194	225,048	190,456	129,019	188,370	208,575	159,580	143,532	1,777,541
1894	132,517	121,161	129,236	130,601	172,543	212,948	143,517	109,794	207,629	281,814	-----	-----	-----
Hudson River:													
1890	192,161	199,589	175,773	121,123	141,239	115,444	125,308	155,164	156,978	170,157	157,443	232,013	1,933,484
1891	212,714	209,422	161,047	134,606	156,251	129,998	140,860	167,420	190,000	193,951	169,549	220,370	2,078,822
1892	232,187	205,343	167,560	139,761	150,803	122,683	114,804	137,399	146,424	173,261	197,762	246,283	2,028,587
1893	207,330	281,568	308,063	292,346	192,442	151,427	159,769	193,442	212,118	239,911	270,083	402,571	2,922,970
1894	458,953	425,047	366,802	270,670	241,771	202,392	190,364	219,561	288,100	302,174	-----	-----	-----
Illinois Central:													
1890	132,936	131,311	154,600	158,644	144,874	149,592	139,102	151,612	246,829	245,392	250,742	192,322	2,126,066
1891	185,925	209,994	183,758	183,758	219,890	188,060	193,931	218,971	239,643	321,059	243,103	225,196	2,664,848
1892	321,844	279,268	229,334	192,054	199,488	177,829	189,290	268,083	239,862	284,029	243,249	224,401	2,899,612
1893	190,130	268,637	280,084	191,648	269,282	261,079	352,788	414,443	410,336	410,336	372,593	359,463	3,445,827
1894	267,061	269,198	265,773	267,643	314,166	397,729	331,432	459,256	466,919	468,766	-----	-----	-----
La Crosse and Milwaukee:													
1890	32,884	36,670	44,269	50,532	69,624	60,780	35,425	52,570	89,847	147,102	95,816	50,864	756,476
1891	53,898	45,689	67,245	113,472	105,003	84,287	76,319	112,485	171,053	171,053	110,936	69,276	1,070,822
1892	54,786	43,912	50,176	125,999	111,768	91,459	63,673	137,187	164,809	122,863	63,771	1,096,046	-----
1893	73,063	66,686	46,912	107,754	147,499	-----	-----	-----	-----	-----	-----	-----	-----
Milwaukee and Prairie du Chien:													
1890	37,520	32,301	39,501	45,811	59,082	48,797	37,429	60,229	139,761	163,615	90,900	44,895	799,841
1891	54,246	44,027	43,637	49,102	112,266	141,771	107,117	90,463	134,728	177,879	139,184	67,990	1,155,407
1892	83,903	62,907	47,010	61,759	130,218	144,915	108,721	76,168	109,661	154,369	122,272	61,836	1,163,734
1893	67,120	76,132	44,925	88,177	106,907	111,260	71,587	69,352	156,417	205,064	-----	-----	-----
Michigan Southern & Northern Indiana:													
1890	104,345	106,828	143,626	145,258	138,084	122,796	107,710	151,170	178,870	218,465	196,495	162,172	1,754,819
1891	131,467	119,833	166,454	170,842	175,481	134,688	127,273	196,821	238,851	274,722	203,492	134,972	2,068,896
1892	140,925	116,933	153,170	186,951	170,362	161,391	126,558	178,773	235,690	276,181	231,268	189,077	2,199,077
1893	163,152	163,728	157,600	183,120	200,826	181,983	180,915	226,819	276,109	305,018	304,084	279,559	2,647,533
1894	245,784	230,508	254,208	267,603	263,951	237,982	188,141	235,512	300,822	371,361	-----	-----	-----
Michigan Central:													
1890	101,386	102,959	151,864	143,143	127,145	119,770	108,303	150,366	210,837	226,077	181,617	132,949	1,756,416
1891	110,712	107,749	166,741	158,510	123,085	128,393	128,393	198,540	251,423	300,474	196,182	129,022	2,025,142
1892	142,334	119,764	151,871	172,614	149,560	133,620	123,377	144,982	236,844	301,333	242,059	200,134	2,124,514
1893	230,159	159,65											

AMERICAN RAILROAD BOND LIST.

(*) signifies that the road is in the hands of receivers. (t) that the company is in default in its interest. "S. F." Sinking Fund. "var." that the bonds fall due at different periods.

Description.	Amount.	Interest.	Interest.		Due.	Price.	Description.	Amount.	Interest.	Interest.		Due.	Price.
			When payable.	Where payable.						When payable.	Where payable.		
Alabama and Florida:							Chicago and Rock Island:						
Mortgage	\$300,000	7			1887		1st Mortgage	1,397,000	7	Jan. & July.	New York.	1870	100
Convert. (guar. by Dir.)	150,000	7			1863		Chicago and Northwestern:						
Alabama and Tenn. Rivers:							Preferred Sinking Fund	1,250,000	7	Feb. & Aug.	N. Y. York.	1885	102
1st Mortgage convertible	833,000	7	Jan. & July.	New York.	1872		General 1st Mortgage	3,000,000	7	" "	" "	1885	101
2d Mortgage	226,705	8			1864		Bonds issued for coupons of do.	750,000	7	May & Nov.	" "	1883	101
Albany, Vt. and Canada:							2d Mortgage	2,000,000	6	" "	" "	1890	101
1st Mortgage	600,000	7	March & Sept.	New York.	1887		Appleton Extension Bonds	184,000	7	Feb. & Aug.	" "	1883	101
Albany and West Stockbridge:							Green Bay Extension Bonds	300,000	7	" "	" "	1883	101
Albany City (S. F.)	1,000,000	6	Jan. & July.	Boston.	'66-'70		Flagg Trust Bonds	245,000	8	Jan. & July.	" "		
Androscoggin and Kennebec:							Cincinnati, Hamilton and Dayton:						
Million Dollar Loan	102,100	6	June & Dec.	Portland	'61-'64	70	1st Mortgage	384,000	7	Jan. & July.	New York.	1887	110
\$1,000,000 Loan	804,600	6	" "	" or	1890	79	2d Mortgage	950,000	7	May & Nov.	" "	1880	110
Stock, convert. (Coupon)	710,000	6	" "	Waterv.	'63-'66		*Cincinnati, Wilm. and Zanesville:						
Atlantic and Great Western:							1st Mortgage	1,300,000	7	Jan. & July.	New York.	1889	
Penn. Division, 1st Mortgage	2,500,000	7	Oct. & April.	New York.	1877	77	2d Mortgage	574,000	7	Feb. & Aug.	" "		
Ohio " 1st Mortgage	4,000,000	7	" "	" "	1875	98	3d Mortgage	158,000	7	" "	" "		
N. York " 1st Mortgage	1,000,000	7	" "	" "	1879	80	Income	250,500	7	" "	" "		
Atlantic and St. Lawrence:							Tunnel Right	1,000,000	7	" "	" "		
Dollar Bonds (Coupon)	988,000	6	April & Oct.	Portland.	1886	92	Cleveland and Mahoning:						
Sterling Bonds (Coupon)	484,000	6	Nov. & May.	London.	1878	97	1st Mortgage	850,000	7	Feb. & Aug.	New York.	1873	105
City of Portland Loan (Coups.)	1,000,000	6	Various	N. Y., P. & Bos.	'63-'70		2d Mortgage	244,200	7	March & Sept.	" "	1884	100
Baltimore and Ohio:							3d Mortgage	658,200	8	" "	" "	1876	
Maryland Sterling B'ds of 1833.	3,000,000	6	Ja. Ap. Ju. Oc.	London.	1838		Clev., Painesville and Ashtabula:						
Mortgage Coupon " 1853.	2,500,000	6	April & Oct.	Baltimore.	1886	107	2d Mortgage	228,000	7	Feb. & Aug.	New York.	1882	101
" " " 1850.	700,000	6	Jan. & July.	" "	1880	107	Special (Sunbury and Erie)	500,000	7	" "	" "	1878	121
" " " 1855.	1,128,500	6	Jan. & July.	" "	1875	108	Dividend Mortgage	900,000	7	" "	" "	1880	
" " " 1834.	1,000,000	6	Ja. Ap. Ju. Oc.	" "	1887	104	Cleveland and Pittsburg:						
Balt. City Loan of 1853	5,000,000	6	Jan. & July.	" "	1890	110	1st Mortgage (Main Line)	800,000	7	Feb. & Aug.	New York.	1880	101
Bellefontaine and Indiana:							2d Mort. (M. L.) or 1st Extension	1,189,000	7	March & Sept.	" "	1873	106
1st Mortgage convertible	791,000	7	Jan. & July.	New York.	1866	101	3d Mort. (M. L.) or 2d Extension	1,166,000	7	" "	" "	1875	102
2d Mortgage	164,000	7	" "	" "	1870		4th Mort. (M. L.) or 3d Extension	1,059,023	6	" "	" "	1886	83
Belvidere Delaware:							River Line bonds	20,000	7	" "	" "	1887	
1st Mort. (guar. C. and A.)	1,000,000	6	June & Dec.	New York.	1867	100	Clev., Columbus and Cin.:						
2d Mortgage (do.)	500,000	6	March & Sept.	Princeton.	1885	95	1st Mortgage, Coupon	509,000	7	Jan. & July.	New York.	'64-'70	
3d Mortgage (do.)	589,500	6	Feb. & Aug.	" "	1877		Cleveland and Toledo:						
Boston Concord and Montreal:							1st Mortgage	234,000	7	April & Oct.	New York.	1887	101
1st Mortgage	200,000	6	Feb. & Aug.	Boston.	1885	100	Junction 1st Mortgage 2d Div.	164,000	7	June & Dec.	" "	1872	101
2d Mortgage	300,000	7	" "	New York.	1865	102	Tol., Nor. and Clev. 1st Mort.	439,000	7	Feb. & Aug.	" "	1883	75
2d Mortgage Coupons	100,000	6	Jan. & July.	Boston.	1870		Tol., Nor. and Clev. 2d Mort.	176,500	7	" "	" "	1883	75
2d Mortgage Coupons	250,000	7	" "	New York.	1870		C. and T. Income Mortgage	65,150	7	March & Sept.	" "	1883	76
Sinking Fund	200,000	6	" "	Boston.	1889	100	C. and T. Income (convertible)	119,000	7	Jan. & July.	" "	1884	
Boston and Lowell:							C. and T. Income (convertible)	169,000	7	" "	" "	1884	
Mortgage	440,000	6	Jan. & July.	Boston.	1873	107	C. and T. Dividend (convertible)	123,410	7	April & Oct.	New York.	1875	70
Buffalo, New York and Erie:							C. and T. Income (convertible)	25,000	7	March & Sept.	" "	1870	
1st Mortgage coupon	2,000,000	7	June & Dec.	New York.	1877	108	U. and T. (S. F.) Mortgage	2,677,000	7	Jan. & July.	" "	1885	110
2d Mortgage coupon	426,714	7	May & Nov.	" "	1872	103	Columbus and Xenia:						
Buffalo and State Line:							Dividend (due 1880, '61, '62, '63)	74,900		June & Dec.	New York.	var.	
1st Mortgage	500,000	7	April & Oct.	New York.	1866	108	Connecticut River:						
Income & In '39, & In '72.	200,000	7	Jan. & July.	" "	var.		Mortgage	250,000	6	March & Sept.	Boston.	1878	104
Unsecured	200,000	7	" "	" "	1864		Connecticut and Passump. Rivers:						
Special Erie and North-East	149,000	7	" "	" "	'61-'70		1st Mortgage	800,000	6	June & Dec.	Boston.	1876	101
Burlington and Missouri:							Cumberland Valley:						
1st Mort. on 1st Division	590,000		Feb. & Aug.	New York.			1st Mortgage	161,000	8	April & Oct.	Philadelphia.	1904	
Cairo and Fulton (Mo.):							2d Mortgage	109,500	8	" "	" "	1904	
State (Mo.) Loan	650,000	6			'78-'70		Dayton and Michigan:						
Camden and Amboy:							1st Mortgage	300,000	8	Jan. & July.	New York.	1897	
English debt (S. F.) £453,093.	2,192,923	6	Semi-annual.	London.	1880		2d Mortgage	2,503,000	8	" "	" "	1881	100
Converted sterling Loan	793,200	5	" "	" "	1863		Dayton and Western:						
American Loan	782,000	6	" "	New York.	1864	106	1st Mortgage	239,000	7	March & Sept.	New York.	1882	101
Extra Dividend Loan	334,455	6	" "	" "	1864		2d Mortgage	250,000	7	Jan. & Dec.	" "		
Loan for \$500,000.	500,000	6	" "	" "	1867	108	Delaware:						
" " \$300,000.	700,600	6	" "	" "	1870	104	1st Mortgage guar. by P. W. & B.	500,000	6	Jan. & July.	Philadelphia.	1875	102
" " \$375,000.	675,000	6	" "	" "	1875	1-2	Guaranteed.	100,000	6	" "	" "	1875	106
" " \$1,700,000.	1,700,000	6	" "	" "	1883	102	State Loan	170,000	6	" "	" "	1876	
" " \$2,500,000.	867,000	6	" "	" "	1889	106	Delaware, Lackawanna and W'n:						
Consolid. Mort. Loan \$5,000,000							1st Mortgage (Lack. & Western)	900,000		April & Oct.	New York.	1871	111
Camden and Atlantic:							1st Mortgage (E. Extension)	1,499,000		" "	" "	1875	114
1st Mortgage Coupon	1,037,375	7	Feb. & Aug.	Philadelphia.	1872		2d Mortgage	2,516,500		March & Sept.	" "	1881	110
Catawba:							Detroit and Milwaukee:						
1st Mortgage	141,000	7	May & Nov.	Philadelphia.	1882		1st Mortgage (convertible)	2,500,000	7	Jan. & July.	New York.	1875	101
Cayuga and Susquehanna:							2d Mortgage	1,000,000	8	" "	" "	1866	
1st Mortgage	300,000	7	Jan. & July.	New York.	1865		3d Mortgage (convertible)	750,000	10	" "	" "	1863	
Central of Georgia:							4th Mortgage (G. W. R. R.)	500,000	8	" "	" "		
Mortgage	86,067	7			1863		Dubuque and Sioux City:						
Central of New Jersey:							1st Mortgage coupon	300,000	7	Jan. & July.	New York.	1883	
1st Mortgage	1,400,000	7	Feb. & Aug.	New York.	'65-'70	103	Dubuque Western:						
2d Mortgage	600,000	7	May & Nov.	" "	1875	112	1st Mortgage	344,000	7	" "	" "		
Central Ohio:							Eastern (Mass.):						
1st Mortgage W. Div.	450,000	7	May & Nov.	Zanesville.	1861	104	Income (due \$75,000 annually)	150,000	6	June & Dec.	Boston.	'63-'64	111
1st Mortgage E. Div.	500,000	7	Feb. & Aug.	" "	1864	94	2d Mortgage (convertible)	500,000	5	Jan. & July.	London.	1872	98
2d Mortgage	800,000	7	June & Dec.	New York.	1865	104	3d Mortgage (convertible)	672,600	6	Feb. & Aug.	Boston.	1874	103
3d Mortgage (S. F.)	950,000	7	" "	" "	1885	75	1st M. (State) \$75,000 a/y'r after '64	500,000	5	Ja. Ap. Ju. Oc.	" "	'65-'71	
4th Mortgage (S. F.)	1,365,800	7	" "	" "	1876	43	East Tennessee and Georgia:						
Charleston and Savannah:							State, 1st Mortgage	970,000					
1st Mortgage (endorsed)	510,000	6					Endorsed by State of Tennessee	160,000					
2d Mortgage	1,000,000	7					Mortgage (ordinary)	790,688					
Cheshire:							East Tennessee and Virginia:						
Bonds of '75, '77, '80	600,000	6	Jan. & July.	Boston.	var.	101	State, 1st Lien	1,602,000					
Chicago, Burlington & Quincy:							Endorsed by State of Tennessee	200,000					
Trust Mort. S. F., convertible	441,000	8	Jan. & July.	New York.	1883	120	1st Mortgage (after State)	100,000					
" " " " " " " "	3,034,000	8	" "	" "	1883	120	Redeemable in Stock	66,950					
Plain Bonds, dated Sept. 20, 1860	755,000	7	March & Sept.	" "	1880		Katon and Hamilton:						
2d Mortgage, inconvertible	935,500	4	July.	Frankfort O.M.	1890		1st Mortgage	757,734	7	" "	" "	var.	
Chicago and Aurora, 1st Mort.	125,000	7	Jan. & July.	New York.	1887		Erie and North-East:						
Central Military Tract, 1st Mort.	106,000	7	" "	" "	1864		Exchanged for Buft. and St. L.	149,000	7	Jan. & July.	New York.	'61-'70	
" " " 2d Mort.	83,000	8	May & Nov.	" "	1865		Florida:						
" " " Plain	25,000	8	March & Sept.	" "	1876		Internal Improvement (State)	1,655,000	7	" "	" "	1891	
Chicago and Alton:							Free Land, 2d Mortgage	1,500,000	8	" "	" "	1891	
1st Mortgage	2,400,000	7	Jan. & July.	New York.	1892	104	Florida and Alabama:						
1st Mortgage pref. S. F.	600,000	7	April & Oct.	" "	1877	95	Internal Improvement (State)		7	" "	" "	1891	
Income Bonds	1,100,000	7	May & Nov.	" "	1882	90	Free Land, 2d Mortgage		8	" "	" "	1891	
Chicago and Milwaukee:							Florida, Atlantic and Gulf Centr.						
1st Mortgage (convertible)	700,000	7	May & Nov.	New York.	1874	90	Internal Improvement (State)	300,000	7	" "	" "	1891	
Real Estate	188,864	7	" "	" "	1868		Free Land, 2d Mortgage	200,000	8	" "	" "	1891	

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Description.	Amount.	Interest.	Interest.				Due.	Price.	Description.	Amount.	Interest.	Interest.				Due.	Price.
			When payable.	Where payable.								When payable.	Where payable.				
Galena and Chicago Union:									Memphis and Ohio:								
1st Mortgage Coupon	1,118,000	7	Feb. & Aug.	New York.	62-'63	111			State (Tenn.) Loan	\$1,340,000	6						
1st Mortgage (Extended)	871,000	7	"	"	1882	112			Michigan Central:								
2d Mortgage (S. F.) Coupon	1,346,000	7	May & Nov.	"	1875	108			1st Mortgage Sterling	487,489	6	Jan. & July.	London.	1872	98 1/2		
Great Western, Ill.:									1st Mortgage S.V. (convertible)	500,000	8	March & Sept.	"	1869	84		
1st Mortgage Western Division	1,000,000	10	April & Oct.	New York.	1898	106			1st Mortgage (convert.) Dollar	2,588,000	8	"	N.Y. & Boston	1869	120		
" Eastern	1,350,000	7	Feb. & Aug.	"	1865	102 1/2			1st Mortgage (S. F.), convertible	4,434,000	8	April & Oct.	"	1882	121		
Hannibal and St. Joseph:									Mich. Southern and N. Indiana:								
Missouri State Loan (1st Lien)	3,000,000	6	Jan. & July.	New York.	73-'87	83 1/2			Michigan Southern, 1st	14,000	7	May & Nov.	New York.	1880	100		
Land Security	5,000,000	7	April & Oct.	"	1881	85			Northern Indiana, 1st	42,000	7	Feb. & Aug.	"	1861	107		
Convertible Bonds	1,390,000	7	Jan. & July.	"	1883				Erie and Kalamazoo	103,000	7	March & Sept.	"	1862			
2d Mortgage	1,200,000	7	April & Oct.	"	1870	49			Michigan Southern, conv.	16,000	7	"	"	1863	85 1/2		
Harrisburg and Lancaster:									Northern Indiana, conv.	20,000	7	Feb. & Aug.	"	1863	81		
New Dollar Bonds	661,000	6	Jan. & July.	Philadelphia.	1883	112 1/2			Jackson Branch	81,000	7	"	"	1865	83		
Hartford and New Haven:									Goshen Air Line	701,000	7	"	"	1868	104		
1st Mortgage	927,000	6	Feb. & Aug.	New York.	1883	90			Detroit and Toledo	812,000	7	"	"	1876	105		
Houston:									1st General Mortgage (S. F.)	5,073,000	7	May & Nov.	"	1885	109		
1st Mortgage	189,000	6	Jan. & July.	Bridgeport.	1877				2d General Mortgage	2,656,500	7	"	"	1877	104		
Houston and Texas Central:									*Milwaukee and Beloit:								
State (1st Lien) Loan	210,000	7							1st Mortgage	630,000	8						
Mortgage	125,000	7							Milwaukee and Chicago:								
Hudson River:									1st Mortgage	400,000	8	Jan. & July.	New York.		107		
1st Mortgage	4,000,000	7	Feb. & Aug.	New York.	69-'70	112			2d Mortgage	200,000	8	"	"				
2d Mortgage (S. F.)	2,000,000	7	June & Dec.	"	1883	120			*Milwaukee and Horicon:								
3d Mortgage	1,840,000	7	May & Nov.	"	1875	133			1st Mortgage	420,000	8					10	
Convertible	1,002,000	7	"	"	1867	103			2d Mortgage	600,000	8						
Illinois Central:									Milwaukee and Prairie du Chien:								
Optional Right bonds	33,000	7	Jan. & July.	New York.	1863				1st Mortgage (Coupon)	2,427,000	7	Jan. & July.	New York.	1891	107		
Construction	11,619,500	7	April & Oct.	London.	1875				Minnesota and Pacific:								
Construction	3,104,000	6	"	New York.	1875	117			Real Estate	1,200,000	7	Jan. & July.		1892			
Eight per cent. bonds	304,000	8	March & Sept.	"	1865				1st Mortgage	350,000	7	"		1893			
Indiana Central:									Mississippi Central:								
1st Mortgage (convertible)	600,000	7	Jan. & July.	New York.	1866				1st Mortgage	1,007,363	7						
2d Mortgage	334,000	10	"	"		110			Mississippi Central and Tenn.:								
Income	20,500								State (Tenn.) Loan	529,000	6						
Indianapolis and Cincinnati:									Mississippi and Missouri:								
1st Mortgage	500,000	7	Jan. & July.	New York.	1866	110			1st Mortgage (convertible)	1,000,000	7		New York.				
2d Mortgage	400,000	7	"	"	1862	100			2d Mortgage (S. F.)	400,000	8		"				
Real Estate Mortgage	200,000	7			1868	63			Oakloma Division	500,000	7		"				
Ind., Pittsburg and Cleveland:									1st Land Grant	2,000,000	7		"			64	
1st Mortgage	650,000	7	Jan. & July.	New York.	1870				2d Land Grant	700,000			"				
2d Mortgage	314,000	7	"	"					Mississippi and Tennessee:								
Indianapolis and Madison:									Tennessee State Loan	98,000	6					1885	
Mortgage	661,000	7	May & Nov.	New York.	1881	83			Mississippi State Loan	202,799	6						
Jeffersonville:									1st Mortgage	171,000	7					1876	
1st Mortgage	187,000	7	March & Sept.	New York.	1861	75			Mobile and Ohio:								
2d Mortgage	392,000	7	April & Oct.	"	1873	70			City (Mobile) Tax Loan	400,000	6						
*Kennebec and Portland:									Tennessee State Loan	674,860	6						
1st Mortgage (City and Town)	800,000	6	April & Oct.	Boston.	1870				Alabama State Loan	389,410	6						
2d Mortgage	280,000	6	"	Augusta.	1861				Income	1,608,070	8	Jan. & July.	New York.	61-'67			
3d Mortgage	250,000	6	"	"	1862				Sterling	878,085	6			1883			
*Kentucky Centr. (Conv. and Lex.)									Mississippi State Loan	200,970	6						
1st Mortgage	160,000	6							Montgomery and West Point:								
2d Mortgage	260,000	7							Alabama State Loan	122,622						var.	
3d Mortgage (convertible)	1,000,000	7							Mortgage (due 1860, '63 and '65)	350,000	6					1866	
4d Mortgage	600,000	7							Muscougee:								
Guaranteed by Covington	200,000	6							1st Mortgage	249,000	7						
Cincinnati (exchanged)	100,000	6							Nashville and Chattanooga:								
Keokuk, Ft. D. Moines and Minn.:									Mortgage (State endorsed)	1,500,000							
City of Keokuk, 20 years	400,000	8							Chat. and Cleve. Subsc. (endors.)	231,000							
City of Keokuk, (special tax)	150,000	10							*New Albany and Salem:								
Keokuk, Mt. Pleasant and Muscat.									Crawfordsville	175,000	7						
Lee County	150,000	8							1st Mortgage	500,000	10						
City of Keokuk	200,000	8							1st Mortgage	2,235,000	6						
La Crosse, Viroqua & Mineral Pt.:									N. Hav., N. Lond. and Stonington:								
1st Mortgage	4,000,000	7	June & Dec.	New York.	1888				Mortgage	450,000	7	March & Sept.	New Haven.	1861			
Lehigh Valley:									2d Mortgage	200,000	6	Jan. & July.	"	1863			
1st Mortgage	1,465,000	6	May & Nov.	Philadelphia.	1873	106			Extension	116,000	6	May & Nov.	"	1873			
La Crosse and Milwaukee:									New Haven and Northampton:								
1st Mortgage (Eastern Div.)	903,000	7	May & Nov.	Milwaukee.		89			1st Mortgage	500,000	7	Jan. & July.	New Haven.	1869			
2d Mortgage (Eastern Div.)	1,000,000	7							New Jersey:								
1st Land Grant (Western Div.)	4,000,000	7	Jan. & July.	New York.		44 1/2			Company's (various)	658,000		Semi-annually.	New York.	var.	102 1/2		
2d Land Grant (Western Div.)	353,600	7	"	"		44 1/2			New London Northern:								
3d Mortgage (whole road)	1,700,000	7							1st Mortgage	51,000	7	Jan. & July.	New London.	1871	100		
Unsecured Bonds	1,755,000	7							N. Orleans, Jackson and Gt. North:								
Lexington and Frankfort:									State (Miss.) Loan	255,000	5					63-'48	
Mortgage, due 1864, '69 and '74	130,000	6		Lexington.	64-'74				1st Mortgage Coupon	2,665,000	8	Jan. & July.	New York.	1886			
Little Miami:									N. Orleans, Opelousa, and Gt. West:								
Mortgage (Coupon)	1,300,000	6	May & Nov.	New York.	1883	105			Louisiana State Loan	641,000	6						
Long Island:									New Orleans City Subscription	1,500,000	6						
1st Mortgage	500,000	6	Jan. & July.	New York.	1870	102 1/2			1st Mortgage (S. F.)	568,000	8					1889	
Extension Bonds	175,000	7	May & Nov.	"	1890	107			New York Central:								
Long Dock Co.:									Premium (S. F.) Bonds	7,350,000	6	May & Nov.	New York.	1883	106		
Mortgage Bonds	500,000	7	June & Dec.	New York.	1882				Funding (S. F.) Bonds	1,498,000	7	Feb. & Aug.	"	1876	115		
Mortgages on Land	473,809	7	"	"					Stock Exchange (S. F.) Bonds	683,000	6	May & Nov.	"	1883	102 1/2		
Louisville and Frankfort:									Real Estate (S. F.) Bonds	165,000	6	"	"	1883	101		
Louisville Loan	100,000		Jan. & July.	New York.	1881				Real Estate Bonds	252,975	6	"	"	1883	101		
1st Mortgage	223,000		"	"	63-'78				Bonds of June, 1854	2,000,000	7	June & Dec.	"	1894	102		
Louisville and Nashville:									New 20 years (S. F.) Bonds	1,000,000	6	"	"	1883			
State (Tenn.), 1st Lien	563,500	6	Jan. & July.	New York.	83-'92				Convertible Bonds	990,000	7	Feb. & Aug.	"	1875	138		
1st Mortgage	2,000,000	7	Feb. & Aug.	"	1883				New York and Erie:								
Lebanon Branch 1st Mortgage	400,000	7			var.				1st Mortgage	3,000,000	7	May & Nov.	New York.	1867	110		
Memphis Branch 1st Mortgage	300,000	7			var.				2d Mortgage	4,000,000	7	March & Sept.	"	1879	115		
McMinnville and Manchester:									3d Mortgage	6,000,000	7	"	"	1883	112		
State (Tenn.)	372,000	6							4th Mortgage	5,100,000	7	April & Oct.	"	1880	106		
Mortgage	24,000	7							5th Mortgage	1,791,500	7	June & Dec.	"	1883	109 1/2		
1st Mortgage	10,000	6							Buffalo Branch	200,000	7	Jan. & July.	"	1891			
Marietta and Cincinnati:									New York and Harlem:								
1st Mortgage Bonds	185,609	7	Feb. & Aug.	New York.	1891	90			1st Mortgage	3,000,000	7	May & Nov.	New York.	1873	108		
1st Mortgage sterling	87,818	7	"	"	1891				2d Mortgage	1,000,000	7	Feb. & Aug.	"	1864	100 1/2		

AMERICAN RAILROAD BOND LIST.

(*) signifies that the road is in the hands of receivers. (†) that the company is in default in its interest. "S. F.," Sinking Fund. "var.," that the bonds fall due at different periods.

Description	Amount	Interest	Interest		Due	Price	Description	Amount	Interest	Interest		Due	Price
			When payable.	Where payable.						When payable.	Where payable.		
N. York, Providence and Boston:							Racine and Mississippi:						
1st Mortgage	\$232,000	6	Feb. & Aug.	New York.	73-78	---	1st Mortgage (Eastern Division)	\$680,000	8	---	New York.	1875	30
North Carolina:							1st Mortgage (Western Division)	757,000	8	---	"	1875	30
State Loan	3,000,000	6	---	---	---	---	Raleigh and Gaston:						
North-Eastern (S. C.):							Coupon	100,000	---	---	---	1862	---
1st Mortgage	700,000	---	---	---	---	---	Richmond and Danville:						
2d Mortgage	224,500	---	---	---	---	---	State (Va.) Loan (34 years)	600,000	6	Feb. & Aug.	New York.	var.	---
Northern Central:							Guaranteed by State	200,000	7	April & Oct.	Richmond.	1875	---
Balt. and Susq. R. R. (Coupons)	150,000	6	Jan. Ap. Ju. Oc.	Baltimore.	1866	---	Mortgage (Coupon)	250,000	7	Feb. & Aug.	"	1859	---
Md. State Loan (irredeemable)	1,500,000	6	"	"	---	---	Richmond, Fred. and Potomac:						
York and Cumberland 1st Mort.	175,000	6	May & Nov.	"	1870	---	Sterling (£287,000)	324,000	6	---	---	1860	---
York and Cumberland 2d Mort.	25,000	6	Jan. & July.	"	1871	---	Richmond and Petersburg:						
Y. and C. guar. by Balt. 3d Mort.	500,000	6	"	"	1877	---	Coupon	159,000	---	---	---	1875	---
N. C. Contract, 2d Mort.	300,000	6	Jan. Ap. Ju. Oc.	"	1875	---	Rutland and Burlington:						
Construction, 3d Mort.	2,500,000	6	Jan. & July.	"	1885	104	1st Mortgage	1,800,000	7	Feb. & Aug.	Boston.	1863	65
Northern (Ogdensburg):							2d Mortgage	937,500	7	"	"	1863	18
1st Mortgage	1,500,000	7	April & Oct.	New York.	1869	100	3d Mortgage	440,000	7	"	"	1863	3
2d Mortgage	3,077,000	7	"	"	1861	23	Sacramento Valley:						
North Missouri:							1st Mortgage	400,000	10	Jan. & July.	New York.	1875	---
State Loan (30 years)	4,350,000	6	Jan. & July.	New York.	72-87	90	2d Mortgage	329,000	10	Feb. & Aug.	San Francisco.	1881	---
North Pennsylvania:							Sandusky, Dayton and Cincinnati:						
Mortgage	2,500,000	6	April & Oct.	Philadelphia.	1875	96	2d Mortgage	997,000	7	---	---	1866	---
Chattel Mortgage	360,000	10	"	"	1887	121	3d Mortgage	1,000,000	7	---	---	1875	---
Northern (N. H.):							Six p. r. cents	422,324	6	---	---	1878	---
Bonds due 1864 and 1874	220,700	6	April & Oct.	Boston.	64-74	108	Sandusky, Mansfield and Newark:						
Norwich and Worcester:							1st Mortgage	1,290,000	7	Jan. & July.	New York.	1866	80
Mass. State Loan	400,000	6	Jan. & July.	Boston.	1877	---	Saratoga and Whitehall:						
Bonds for Dividend Scrip.	100,000	7	"	New York.	64-74	---	1st Mortgage	250,000	7	April & Oct.	New York.	1868	---
Steamboat Bonds	200,000	7	Feb. & Aug.	"	63-70	---	1st Mortgage (R. and W. Br.)	100,000	7	March & Sept.	"	1866	---
Ohio and Mississippi (O. and Ind.):							Seaboard and Roanoke:						
1st Mortgage	2,050,000	7	Jan. & July.	New York.	1872	---	1st Mortgage	300,000	7	---	---	1880	---
2d Mortgage	238,000	7	April & Oct.	"	1880	---	2d Mortgage	75,000	7	---	---	1870	---
Construction	4,242,000	7	March & Sept.	"	1876	17	Dividend Bonds	12,083	7	---	---	1873	---
Income	3,520,000	7	May & Nov.	"	1881	---	South Carolina:						
Orange and Alexandria:							State Loan	187,000	5	---	---	1868	---
1st Mortgage	400,000	6	May & Nov.	New York.	1866	---	Sterling	183,332	6	---	---	1863	---
2d Mortgage or 1st Extension	1,200,000	6	Jan. & July.	"	1875	---	Sterling	2,000,000	5	---	London.	1866	---
2d Extension	600,000	8	May & Nov.	"	1873	---	Southern Mississippi:						
Pacific (Mo.):							1st Mortgage	600,000	---	---	---	---	---
State (Mo.) Loan	7,000,000	6	Jan. & July.	New York.	71-87	90	South-Western (Ga.):						
State Loan (S. W. Branch)	1,263,000	6	"	"	87-89	---	1st Mortgage	631,000	---	---	---	1875	---
Construction	3,235,000	7	"	"	---	55	Springfield, Mt. Vern. and Pittab.						
Panama:							1st Mortgage	600,000	---	---	---	---	---
1st Mortgage Sterling	1,250,000	7	April & Oct.	London.	1865	100	2d Mortgage	450,000	---	---	---	---	---
2d Mortgage Sterling	1,160,000	7	Feb. & Aug.	"	1872	---	Staubenv. and Ind. (P. C. and C.):						
Pennsylvania:							1st Mortgage	1,500,000	7	Jan. & July.	Philadelphia.	1870	---
1st Mortgage	4,980,000	6	Jan. & July.	Philadelphia.	1880	110	2d Mortgage	900,000	7	"	"	1865	---
2d Mortgage	2,421,000	6	April & Oct.	"	1875	105	St. Louis and Iron Mountain:						
3d Mortgage	2,126,400	6	"	"	1875	---	State (Mo.) Aid	3,501,000	6	---	New York.	---	90
State Works Bonds	7,000,000	5	Jan. & July.	Harrisburg.	1894	105	St. Louis City Subscription	500,000	---	---	---	---	---
Penobscot and Kennebec:							St. Louis County Subscription	1,000,000	---	---	---	---	---
Bangor City 1st Mortg. (Coupon)	730,000	6	April & Oct.	Boston.	74-75	---	Sunbury and Erie:						
2d Mortgage (Coupon)	277,000	6	Feb. & Aug.	Bangor.	1876	---	1st Mort. (Sunbury to Wm'spt)	1,000,000	7	April & Oct.	Philadelphia.	1877	111
3d Mortgage (Coupon)	156,000	6	March & Sept.	"	1871	---	Mortgage (half to State)	7,000,000	5	Jan. & July.	"	75-78	---
Peoria and Oquawka:							Syracuse, Binghamton and N. Y.:						
1st Mortg. (W. Ext.) convertible.	500,000	8	May & Nov.	New York.	1862	---	1st Mortgage Coupon	1,400,000	7	April & Oct.	New York.	1876	---
1st Mortg. (E. Ext.) convertible.	500,000	8	June & Dec.	"	1873	---	St. Louis, Alton & Terre Haute:						
Petersburg and Lynchburg (S. Side):							1st Mortgage (series A)	1,100,000	7	Jan. & July.	New York.	1894	163
State (Va.) Loan (S. F.)	800,000	7	---	---	---	---	" " (series B)	1,100,000	7	April & Oct.	"	1894	---
1st Mortgage (1859-70-75)	365,000	6	---	---	---	var.	2d " " (series C)	1,400,000	7	Feb. & Aug.	"	1894	91
3d Mortgage (1862-70-72)	378,000	6	---	---	---	var.	" " (series D)	1,400,000	7	May & Nov.	"	1894	---
Special Mortgage (1865-68)	175,000	6	---	---	---	var.	" " Income (series E)	1,700,000	7	"	"	1894	84
Last Mortgage (1861 to 1869)	133,500	8	---	---	---	var.	Tennessee and Alabama:						
Phila., Germantown and Norristown:							State (Tenn.) Loan	814,000	---	---	---	---	---
Consolidated Loan	119,800	6	Jan. & July.	Philadelphia.	1895	105	Terre Haute and Richmond:						
Convertible Loan	202,500	6	"	"	1885	119	1st Mortgage (convertible)	171,000	7	March & Sept.	New York.	1860	---
Philadelphia and Reading:							Toledo and Wabash:						
Bonds of 1836 (unconvertible)	405,000	5	Jan. & July.	Philadelphia.	1867	---	1st M. (Toledo and Wabash)	900,000	7	Feb. & Aug.	New York.	1865	100
" 1836, "	192,000	5	"	"	1880	103	1st M. (L. E. Wab. and St. Louis)	2,500,000	7	"	"	1865	---
" 1849, "	3,084,000	6	April & Oct.	"	1870	104	2d M. (Toledo and Wabash)	1,000,000	7	May & Nov.	"	1875	55
" 1861, "	273,000	6	Jan. & July.	"	1871	109	2d M. (Wabash and Western)	1,500,000	7	"	"	1878	---
" 1813, "	1,531,300	6	"	"	1880	109	Interest Bonds	245,700	7	---	---	---	90
" 1844, (convertible)	863,000	6	"	"	1880	122	Vermont Central:						
" 1845, "	124,000	6	"	"	1880	110	1st Mortgage Coupon	2,000,000	7	May & Nov.	Boston.	1861	77
" 1849, "	83,000	6	"	"	1880	110	2d Mortgage Coupon	1,135,000	7	Jan. & July.	"	1867	13
" 1857, "	3,417,000	6	"	"	1886	120	Virginia Central:						
" 1856, "	1,470,000	7	"	"	1886	120	Mort., guaranteed by State of Va.	100,000	6	Jan. & July.	Richmond.	1880	85
Phila., Wilmington and Baltimore:							Mortgage (coupons)	198,000	5	"	Richm'd &	1872	---
Mortgage Loan	2,490,500	6	Jan. & July.	Philadelphia.	1884	135	Mortgage, (coupons)	926,000	6	"	New York.	1864	---
Improvement	88,500	6	May & Nov.	Boston.	1863	---	Virginia and Tennessee:						
Pittsburg and Connellville:							State (Va.) Loan	1,000,000	6	Jan. & July.	Richmond.	1887	---
1st Mortgage (Turtle Cr. Div.)	400,000	6	Feb. & Aug.	New York.	1889	---	1st Mortgage	500,000	6	"	New York.	1872	85
Pittsburg, Ft. Wayne and Chicago:							2d Enlarged Mortgage	1,000,000	6	"	"	1884	29
1st Mortgage (series A)	875,000	7	Jan. & July.	New York.	1912	109	Salt Works Br. Mort. due '58-'61	203,000	6	"	Lynchburg.	var.	---
" (series B)	875,000	7	Feb. & Aug.	"	1912	"	Warren (N. J.):						
" (series C)	875,000	7	Mar. & Sept.	"	1912	"	1st Mortgage	563,500	7	Feb. & Aug.	New York.	1875	---
" (series D)	875,000	7	April & Oct.	"	1912	"	Warwick Valley, N. Y.:						
" (series E)	875,000	7	May & Nov.	"	1912	"	1st Mortgage	60,000	7	April & Oct.	New York.	1880	87
" (series F)	875,000	7	Jan. & Dec.	"	1912	"	2d Mortgage	25,000	7	Jan. & July.	Chester.	1871	70
2d " (series G)	860,000	7	Feb. & Aug.	"	1912	104	Watertown and Rome:						
" (series H)	860,000	7	Mar. & Sept.	"	1912	"	Mortgage (new bonds)	800,000	7	March & Sept.	New York.	1880	---
" (series I)	860,000	7	April & Oct.	"	1912	"	Western (Mass.):						
" (series K)	860,000	7	May & Nov.	"	1912	"	Sterling (£289,900)	4,319,520	5	April & Oct.	London.	68-71	---
" (series L)	860,000	7	June & Dec.	"	1912	"	Dollar Bonds	850,000	6	"	Boston.	1875	107
3d " (series M)	860,000	7	"	"	1912	85	Albany City Bonds	1,000,000	6	Jan. & July.	"	60-76	---
Bridge Bonds	2,000,000	7	April	"	1912	---	Hudson & Boston R. R. Loan	150,000	6	June & Dec.	"	dem.	---
Chicago Depot Bonds	29,758	6	May & Nov.	Philadelphia.	1865	---	Elmira and Williamsport:						
"	29,420	8	May & Nov.	Chicago.	1865	---	1st Mortgage	1,000,000	7	Jan. & July.	Philadelphia.	1880	100
Pittsburg and Steubenville:							Wilmington and Manchester:						
Mortgage	800,000	7	Feb. & Aug.	New York.	1865	---	1st Mortgage	596,000	7	May & Nov.	New York.	1866	60
Potomac and Watertown:							2d Mortgage	200,000	7	"	"	1872	---
1st Mortgage	1,000,000	7	June & Dec.	New York.	64-74	---	Wilmington and Weldon:						
Quincy and Chicago:							Mortgage, payable in England	443,555	6	Jan. & July.	London.	1868	---
1st Mortgage	1,200,000	---	---	---	1873	---	Sterling, issued in 1855	144,500	6	---	---	1868	---
							Company's, endorsed by State.	180,000	6	---	---	1873	---

RAILROAD SHARE LIST, including Mileage, Rolling Stock, etc., etc.

An asterisk (*) occurring in the column headed "Rolling-Stock," signifies that the cost is included in that of "Railroad and Appurtenances." A dash (-) signifies "nil." Running dots (....) signify "not ascertained." Land-Grant Railroads are in *italics*.

Years ending.	Railroad.				Equipment.			Companies.	Abstract of Balance Sheet.										Earnings.			
	Main Line.	Lateral and Branch Lines.	2nd Truck and Sidings.	Road in progress or projected.	Engines.	Passenger Cars.	Freight, etc.		Property and Assets.				Liabilities.				Balance Total, incl. all other assets and liabilities.	Road operated, incl. road leased, etc.	Mileage run by locomotives with trains.	Earnings.		
									Railroad and Appurtenances.	Rolling-Stock.	Invested in foreign works.	Share Capital paid in.	Bonds and Mortgage Debt.	Floating Debt.	Gross.	Net.				Dividends.	Price of shares.	
M.	M.	M.	M.	No.	No.	No.																
ALABAMA.																						
30 Jun. '60	65.0				50.6			Alabama and Florida	1,451,336			877,933	503,500	105,255	1,515,704	54.0		101,102	37,866			
28 Feb. '59	30.3				58.1	2	19	Alabama and Mississippi	461,505	30,991		335,010	109,500	21,632	518,965	30.3		55,791	31,852			
31 May '60	109.6				57.8	11	102	Ala. and Tennessee Rivers	2,261,927	184,006		1,067,006	777,777	240,485	2,176,028	109.6		207,026	111,232			
30 Jun. '59	57.0				171.3			Mobile and Girard	1,500,000							57.0	236,791	76,773	21,006			
1 Apr. '61					67.2	1	10	Mobile and Great Northern	590,216			600,431			600,431							
1 May, '61	469.3	13.5			49.4	40	28	Mobile and Ohio	12,000,000									1,402,858	695,370			
29 Feb. '60	88.5	28.4			209.5	23	14	Montgomery and West Point	1,838,718	427,265	100,000	1,419,769	922,622	23,579	2,582,505	118.9		505,156	260,269	6		
1 May, '61								North East and South West														
ARKANSAS.																						
30 Nov. '55	38.5				301.4			Cairo and Fulton														
					107.5			Memphis and Little Rock	553,577			351,524	446,000	19,725	811,949							
30 Dec. '60	22.5							California.														
								Sacramento Valley	1,493,850			793,560	700,000		1,493,850	22.5		220,251	104,594			
CONNECTICUT.																						
1 Feb. '63	23.8				8.2	4	5	Danbury and Norwalk	344,475	66,483		307,010	100,000		418,825	23.8	47,301	61,516	36,019	5		
30 Sep. '62	122.4				15.0	16	20	Hartford, Provid. and Flahkill	3,902,356	302,511		1,936,740	2,037,500	211,574	4,443,884	122.4	229,058	301,402	126,918			
31 Aug. '65	61.4	1.6			64.5	18	21	Hartford and New Haven	3,260,095	254,000	141,706	2,350,000	927,000		4,181,255	73.0	404,297	953,459	599,153	17	142	
31 Dec. '62	74.0				8.9	11	17	Housatonic (preferred)	2,459,775			2,000,000	240,000	61,872	2,625,236	124.0		254,485	70,157	4		
31 Dec. '62	67.0				1.3	7	11	Naugatuck	1,210,899	200,000	11,850	1,031,800	358,050	26,924	1,594,661	62.0		203,420	97,700	6		
31 Dec. '62	62.0				2.6	6	12	N. Haven, N. London and Ston.	1,454,040			738,538	750,000	156,429	1,644,967	62.0		127,390	135,072		117	
31 Dec. '62	75.9	8.8			7.2	9	12	New Haven and Northampton	1,774,455	38,023		1,010,000	650,000		1,812,476	operated by N. Y.		151,731	38,766	5	90	
31 Dec. '62	68.0				5.9	7	9	New London Northern	677,552			602,152	75,526		696,827	66.0	156,905	151,731	38,766	5	90	
31 Mar. '63	61.3	1.0			63.8	28	74	New York and New Haven	4,643,832	712,493		3,000,000	2,000,000		5,764,362	117.4	518,110	1,036,437	444,096	12	128	
30 Nov. '62	59.4	7.0			8.5	16	17	Norwich and Worcester	2,463,953	149,711	214,100	2,122,600	799,300	9,298	3,064,867	66.4	294,173	353,064	158,927	96		
DELAWARE.																						
31 Oct. '60	84.3				13.7			Delaware	1,552,257			406,132	670,000	271,877	1,607,684	84.3	136,631	138,970	41,466			
31 Oct. '62	16.2							Newcastle and Frenchtown	704,860		18,535	744,520		6,024	749,544	6.0		27,283	10,296	9		
FLORIDA.																						
					150			Florida														
30 Apr. '60	32.0				3.0	13.0	3	Florida and Alabama	532,791	30,586		191,435	195,000	75,894	619,112	32.0		7,857	3,535			
	59.9				5.0			Fla. Atlantic and Gulf Central														
	100.0	3.9			10.0	153.5		Pensacola and Georgia														
GEORGIA.																						
30 Jun. '60	56.7				16	7	124	Atlanta and West Point	1,192,389			1,250,000	126,000		1,597,385	56.7		418,086	205,827	8	125	
	92.6				8.7	70.9		Atlanta and Gulf—M. Trunk														
31 Dec. '60	53.0							Augusta and Savannah	1,032,200			733,700	129,500		863,200	53.0		168,988	95,612			
30 Apr. '60	43.5				23.7			Brunswick and Florida	755,000			351,387			1,106,387	43.5						
30 Nov. '60	191.0				53	62	697	Central of Georgia (and Bank)	4,366,800			4,366,800			6,690,173	229.0	879,468	1,715,025	764,574	10		
31 Mar. '60	171.0	61.0						Georgia (and Bank)	4,156,000		1,003,650	4,156,000	312,500		5,123,343	232.0	1,159,188	628,043	8	100		
30 Nov. '60	102.5				19	16	171	Macon and Western	1,500,000			1,500,000			1,668,976	102.5	226,241	404,618	212,676	19	72	
31 July '59	50.0				3	2	107	Macon and Western	774,244	162,534		669,950	249,000		1,026,898	50.0		202,714	110,516	8		
1 May '60	68.1				3	4	33	Savannah, Albany and Gulf	1,386,634	52,374		1,275,901	10,200	180,621	1,473,140	71.6						
31 July '60	106.1	100.8			16.2			South Western	3,770,425			2,921,900	396,500	19,913	3,822,913	228.8						
30 Sep. '59	138.0				52	24	705	Western and Atlantic	5,901,497			built and own'd by State.			1,380			882,343	454,541			
ILLINOIS.																						
31 Dec. '62	220.0				35	38	712	Chicago and Alton	8,117,539			4,244,222	4,100,000	167,877	8,721,057	251.0		976,381	1,225,001	457,794	82	
30 Apr. '63	138.0				26.0	73	46	Chic., Burlington and Quincy	6,444,452	1,490,361	4,438,510	5,738,640	6,102,594		13,179,500	263.0	1,303,146	2,412,821	1,206,039	8	116	
31 Dec. '58	45.0				6	14	101	Chicago and Milwaukee	1,799,894	67,869	120,000	988,000	762,865	188,095	2,050,065	45.0	14 mo.	243,282	135,284		70	
1 Apr. '63	242.0				29.0	36	23	Chicago and Northwestern	12,325,899	510,983		3,731,316	8,395,000	226,641	13,147,136	242.0		1,093,054	438,603	8	45	
31 Mar. '63	181.8				61	57	960	Chicago and Rock Island	7,093,728			5,604,000	1,467,000		7,043,039	228.4	1,030,884	1,529,141	618,100	6	102	
10 Nov. '62	33.2							Fox River Valley	580,000			580,000			580,000							
31 Dec. '62	140.0	80.4			66	63	1,369	Galena and Chicago Union	8,108,705	1,311,917	248,560	6,028,400	3,335,000		10,551,145	341.7	1,420,341	1,777,541	824,605	6	106	
31 May '63	174.5	5.5			14.3			Great Western	4,039,561			1,648,561	2,360,000		4,214,342	150.0		742,097	377,476		65	
31 Dec. '62	454.8	252.6			112	94	2,335	Illinois Central	27,675,671			16,824,360	15,060,500		36,071,680	708.3	2,561,192	5,446,927	1,870,723	4	116	
					81.5			Illinois River														
	148.0							Ohio and Mississippi	4,570,588			1,780,295	3,292,403			148.0						
	46.6							Peoria and Bureau Valley				600,000					oper. by Chic.	& R. Ia.	126,000			
	186.0				129.0			Peoria and Hannibal														
	186.0							Peoria and Ogawka	5,400,000			1,569,889	2,200,000			186.0						
31 Dec. '62	100.0							Quincy and Chicago	1,975,558			800,000	1,200,000		2,000,000	100.0		oper. by Chic.	Bur. & Quincy			
	1.0							Rock Island Bridge									oper. by Chic.	& R. Ia.				
31 Dec. '62	189.0	14			31	30	424	St. Louis, Alton & Terre Haute	10,100,000			3,700,000	6,700,000		10,400,000	203.0		1,117,093	568,020		55	
INDIANA.																						
	108.0							Cincinnati and Chicago	2,080,433			1,106,679	1,006,123									
	29.0				73.0			Cincinnati, Peru and Chicago														
31 Aug. '57	109.0							Evansville and Crawfordville	2,233,415		2,750	986,061	1,219,100	81,772	2,283,748	109.0		249,867	119,34			

RAILROAD SHARE LIST, including Mileage, Rolling Stock, etc., etc.

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Years ending.	Railroad.				Equipment.			Companies.	Abstract of Balance Sheet.										Earnings.				
	Main Line.	Lateral and Branch Lines.	2nd Track and Sidings.	Road in progress or projected.	Cars.				Property and Assets.				Liabilities.				Balance Total, incl. all other assets and liabilities.	Road operated, incl. road leased, etc.	Mileage run by locomotives with trains.	Gross.	Net.	Dividends.	Price of shares.
					Engines.	Passenger.	Freight, etc.		Railroad and Appurtenances.	Rolling-Stock.	Invested in foreign works.	Share Capital paid in.	Bonded and Mortgage Debt.	Floating Debt.									
															No.	No.							
30 Nov. '62	55.0				6	4	74	Androscoggin	1,050,000	*			151,833	444,633	205,584	757,351	36.5	76,344	79,761	43,461			
30 Jan. '62	149.0		25.0		41	17	349	Atlantic and St. Lawrence	6,788,205	867,734		2,494,900	3,068,491		7,953,475	149.0	oper. by	Gd. Tk.					
30 Jun. '60	12.5				4	3	45	Bangor, Oldtown and Milford.	244,726			135,000	3,472,000	40,576	244,726	12.6		30,880					
30 Sep. '61	63.0	9.5	8.0		12	11	120	Kennebec and Portland	2,871,264			1,287,779			271,143	2,690,998	109.5	139,953	172,113	91,487			
31 May, '63	92.7	9.5			13	2	231	Maine Central	4,211,878			21,925	1,050,830	3,068,491	139,582	4,269,303	109.2	186,240	323,032	174,028			
31 Dec. '59				14.0				Penobscot	328,412			178,014	180,497	300,000	75,000								
31 May, '63	51.5				10	4	103	Portland, Saco and Portsmouth	1,494,792			100,000	1,500,000		1,632,446	51.3		283,197	170,276	6	110		
31 May, '60	37.0							Somerset and Kennebec	789,763				169,200	556,600		37.0		55,403	25,404				
31 May, '61	18.6			33.5				York and Cumberland	1,090,000				370,000	450,000	270,000	1,090,000	18.6		26,356				
MARYLAND.																							
30 Sep. '60	279.6	7.2			235	124	3,272	Baltimore and Ohio	21,314,042	3,604,731	3,579,907	13,118,902	10,781,833	566,070	31,241,011	279.6		3,922,203	2,305,788	6	80		
30 Sep. '60	30.0				7	33	167	Washington Branch	1,650,000			1,650,000			1,824,806	30.0		187,427	462,880	9	120		
31 Dec. '62	138.0	4.0	16.4		51	28	1,547	Northern Central	7,335,009	774,568	466,133	2,260,000	5,150,000	402,054	9,888,621	138.0		940,558	1,920,641	9	41		
MASSACHUSETTS.																							
30 Nov. '62	21.2	2.1			21	37	602	Berkshire	600,000	100,000		600,000			600,000	21.2		42,000	42,000	7			
30 Nov. '62	28.7	1.8	43.6		33	72	484	Boston and Lowell	2,245,143	183,245		1,830,000			2,755,815	70.9		336,565	421,909	61	100		
31 Mar. '63	74.3	8.8	51.1		33	72	484	Boston and Maine	3,880,250	400,483	496,093	4,076,974			5,026,336	119.3		620,840	945,980	450,302	8	128	
30 Nov. '62	47.0	7.0	32.5		26	40	209	Boston and Providence	2,962,000	207,400		3,160,000	122,720		3,282,720	61.8		435,121	702,222	355,302	8	124	
30 Nov. '62	44.6	24.0	60.1		30	68	273	Boston and Worcester	4,062,594	437,416	100,000	4,500,000			5,335,584	83.6		564,117	1,006,130	490,304	24	60	
30 Nov. '62	46.0	1.1	2.7		7	15	102	Cape Cod Branch	907,760	123,865		681,654	141,600		1,035,074	47.1		75,219	102,627	50,053	24	60	
30 Nov. '62	50.0	2.4	8.8		12	19	176	Connecticut River	1,614,386	187,555		1,591,100	250,000		1,900,919	52.4		170,018	268,152	133,854	6	105	
30 Nov. '62	44.2	30.5	25.2		26	51	413	Eastern	3,912,207	315,165	264,102	2,853,400	1,912,600	30,000	4,766,000	89.0		452,168	635,629	315,734	8	126	
30 Nov. '62	19.9	1.3	3.5					Essex	742,592	4,416		299,108	280,261	184,760	764,119	21.2		56,482	55,601	15,103	6	107	
30 Nov. '62	50.9	42.5	74.5		23	36	646	Fitchburg	3,189,551	359,149		2,640,000			3,829,341	83.4		342,542	580,580	254,146	6	114	
30 Nov. '62	14.0		2.3		4	4	36	Fitchburg and Worcester	234,774	40,226		219,326	64,100	5,946	289,772	26.1		33,739	38,558	4,619	6	105	
30 Nov. '62	29.8		3.0		3	3		Hampshire and Hampden	577,933	28,748		292,951	803,014		606,851	29.8		27,424	16,344	1,233	6	105	
30 Nov. '62	12.4		2.3		2	4	26	Lowell and Lawrence	332,885	30,276		200,000	75,000	11,752	367,182	12.4		21,780	21,780	6	105		
30 Nov. '62	14.5		17.2		11	19	337	Nashua and Lowell	558,919	95,684		600,000			802,401	17.0		148,515	138,133	46,540	8	125	
30 Nov. '62	20.1	1.5	1.1		6	14	74	New Bedford and Taunton	502,760	54,214	14,000	600,000	300,000		800,000	36.7		42,262	124,178	45,893	6	87	
30 Nov. '62	27.0		2.4					Newburyport	507,386			220,340	234,900	140,902	697,386			oper. by	B. & M. Co.				
30 Nov. '62	25.0		0.6	8.0	3	4	13	N. York and Boston Air Line	832,164	46,269		293,701	550,000	175,672	1,019,373	25.0		53,624	44,589	9,853	18		
30 Nov. '62	79.5	7.8	26.5		24	64	485	Old Colony and Fall River	3,008,445	354,503		3,015,100	350,500	134,058	4,187,740	102.1		388,585	560,150	312,031	6	143	
30 Nov. '62	18.7		0.7		1	2	1	Pittsfield & N. Adams, guar.	432,430	11,247		450,000			450,000	18.7		24,960	43,142	23,677	6	109	
30 Nov. '62	43.4	1.0	14.9		13	18	252	Providence and Worcester	1,409,086	282,815		1,600,000	97,000		1,697,000	44.4		206,064	327,457	161,357	8	120	
30 Nov. '62	18.9		1.7					Salem and Lowell	381,470	82,543		243,503	226,900		464	471,170	oper. by	B. & M. Co.					
30 Nov. '62	11.5		0.4		2	9	17	South Shore	462,367	30,226		259,686	150,000	1,456	531,715	11.5		22,218	64,425	20,484	7	125	
30 Nov. '62	21.9		1.1		3	10	70	Stockbridge and Pittsfield	444,000	4,100		448,700			448,700	oper. by	H. Watson.						
30 Nov. '62	6.1	0.6	1.2					Taunton Branch	250,000			250,000			239,740	11.7		51,210	134,018	23,376	9	128	
30 Nov. '62	69.8	8.0	5.5		11	13	180	Troy and Greenfield	1,756,370			923,810	979,308	42,352	1,945,470	oper. by	T. and B.						
30 Nov. '62	156.1	17.3	126.6		73	61	1,170	Vermont and Massachusetts	3,309,557	207,343		2,214,225	990,525		3,510,900	77.3		112,242	216,065	115,241	8	134	
30 Nov. '62	156.1	17.3	126.6		73	61	1,170	Western (incl. Alb. & W.S. etc.)	10,122,764	1,095,712		5,150,000	6,417,520	47,000	14,424,472	218.0		1,257,201	2,095,922	984,504	8	130	
30 Nov. '62	45.7		9.3		10	12	145	Worcester and Nashua	1,147,044	123,353		1,141,000	141,500	1,130	1,356,645	45.7		164,248	200,744	92,979	51	83	
MICHIGAN.																							
1 Jun. '62	17.3			2.7	2	1	100	Bay de Noquet and Marquette				built and	equipped by	G. Tr. & R. Co. of	Canada								
30 Sep. '62	57.0							Chic. Detroit & Can. G. T. Junc.	8,270,623	647,596		2,950,000	4,250,000		9,008,369	188.0			340,808				
30 Jun. '62	188.0							Detroit and Milwaukee															
								Point and Pere Marquette															
								Grand Rapids and Indiana															
31 May, '63	294.8	28.4			98	85	1,569	Michigan Central	13,505,576	*		6,057,433	7,999,489		14,834,955	329.3		1,443,558	2,046,560	1,074,200	8	123	
31 Mar. '63	246.0	281.0			83	110	1,103	Mich. S't'n & N't'n Indiana	13,613,021	1,644,259	1,553,252	9,018,200	9,527,078		18,545,278	527.0		2,060,637	2,613,831	1,461,276	79		
								Pori Huron and Milwaukee															
MINNESOTA.																							
31 Dec. '62	14.5				608.5	2	2	10	Minnesota and Pacific	1,400,000			1,550,000										
31 Dec. '62					190.0				Southern Minnesota				675,000										
31 Dec. '62					114.0				Minneapolis and Cedar Valley				600,000										
31 Dec. '62					268.0				Minnesota Transit				300,000										
31 Dec. '62					79.0				Root River Valley														
MISSISSIPPI.																							
30 Apr. '60	280.0				25	22	330	Mississippi Central	4,966,022	756,292		2,000,961	2,554,732	895,992	6,331,899	236.0		554,342	323,092				
31 Oct. '61	71.4				27.8	7	4	41	Mississippi and Tennessee	1,254,894	159,018		708,235	466,943	275,060	1,974,444	59.7		176,462	116,433			
31 Dec. '61	83.2				60.4				Southern Mississippi	2,750,000	*		1,000,000	1,400,000		83.2		250,047	121,660				
MISSOURI.																							
31 Dec. '62	37.0		2.8	51.0				Cairo and Fulton	1,213,467			500,000	650,000			37.0							
31 Dec. '62	206.8	13.2			31	19	420	Hannibal and St. Joseph	11,369,702	1,022,801		1,782,886	10,717,000			206.8		438,544	258,544		48		
31 Dec. '62	168.8	17.7	63.0		21	20	307	North Missouri	6,398,778	504,983		2,459,207	4,350,000			168.8		444,460	182,895				
31 Dec. '62	52.0		0.6					Platte County	1,200,000			500,000	700,000			52.0							

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Years ending,	Railroad.				Equipment.			Companies.	Abstract of Balance Sheet.										Earnings.				Price of shares.
	Main Line.	Lateral and Branch Lines.	2nd Track and Sidings.	Road in progress or projected.	Engines.	Cars.			Property and Assets.			Liabilities.			Total, incl. all other assets and liabilities.	Road operated, incl. road leased, etc.	Mileage run by locomotives with trains.	Earnings.					
						Passenger.	Freight, etc.		Railroad and Appurtenances.	Rolling-Stock.	Invested in foreign works.	Share Capital paid in.	Bonded and Mortgage Debt.	Floating Debt.				Gross.	Net.	Dividends.			
M.	M.	M.	M.	No.	No.	No.		\$	\$	\$	\$	\$	\$	\$	M.	M.	\$	\$	P. c.				
11 Sep. '62	2.0			137.0	1		10	New York.	1,044,914	6,367		891,575	200,000	8,500	1,100,075								
11 Sep. '62	11.5			3.3	21.5			Albany and Susquehanna	600,000			600,000			600,000								
11 Sep. '62	48.9			2.8		4	60	Albany and Vermont	2,250,277	85,207		687,872	1,607,500	25,568	2,320,940	48.9	140,555	224,418	123,989				
11 Sep. '62	14.5			1.0				Atlantic and Great Western	498,217			250,000	220,000		498,217								
11 Sep. '62	6.4			6.4		25		Blossburg and Corning	164,521	71,515		200,000	27,500	324	238,036								
11 Sep. '62	14.5			9.5		2	59	Broadway (Brooklyn)	675,687	119,225		492,050	252,100	62,967	807,217								
11 Sep. '62	28.3			26.9	1.9	169		Brooklyn Central and Jamaica	1,020,370	312,136		1,000,000	170,000	10,000	1,332,566								
11 Sep. '62	5.3			5.3	15.2	25		Brooklyn City	267,628			346,000	146,000	5,000	600,000								
11 Sep. '62	142.0			13.0		28	32	Brooklyn City and Newtown	3,188,461		160,677	850,000	2,420,714	135,547	3,682,852								
11 Sep. '62	68.3			14.5		29	24	Brooklyn City and New York	2,277,838	508,676	149,000	1,977,950	949,000	2,717	503,517								
11 Sep. '62	10.5			0.3		20		Buffalo and State Line	501,364			493,500	7,000	2,717	503,517								
11 Sep. '62	6.3			6.3		32		Coney Island and Brooklyn	874,125	64,237		800,000		25,000	938,365								
11 Sep. '62	46.8			2.9				Eight Avenue (New York)	500,000			500,000			500,000								
11 Sep. '62	446.0			10.0	290.0	226	101	Elmira, Jefferson & Canand.	39,955,921			19,973,200	19,831,500	480,665	40,285,265								
11 Sep. '62	144.0			4.0	115.1	65	117	Elrie	10,749,863	1,303,931		3,758,468	9,385,750	258,424	13,420,640								
11 Sep. '62	96.0			2.5	11.4	14	37	Hudson River	2,567,162	361,312		1,852,716	782,462	15,213	2,928,474								
11 Sep. '62	297.8			268.1	351.8	229	231	Long Island	26,267,149	5,257,077	782,580	24,000,000	14,279,533	41,866,835	654.9	5,363,772	9,356,828	3,749,077					
11 Sep. '62	130.7			2.1	29.0	32	77	New York Central	9,385,740	650,804		5,717,100	5,995,061	69,136	11,781,297								
11 Sep. '62	93.6			1.04	6.9			New York and Harlem	1,000,000			1,000,000			1,000,000								
11 Sep. '62	5.0			5.0		42		Niagara Bridge and Canand.	851,174	24,600		795,360			875,774								
11 Sep. '62	118.0			8.8	17.0	28	14	Ninth Avenue (New York)	4,091,455	728,524		4,571,900	1,494,000	16,375	6,066,800								
11 Sep. '62	35.9			2.2		6	19	Northern (Ogdensburg)	698,935	116,625		396,340			815,161								
11 Sep. '62	25.2			2.0		7	11	Oswego and Syracuse	742,980	157,048		610,000	244,750		900,028								
11 Sep. '62	172.1			17.5	15.4	22	17	Rensselaer and Saratoga	3,092,378	368,305		1,499,100	1,923,000	64,292	3,486,392								
11 Sep. '62	21.0			1.6				Rome, Water'n & Ogdensb'g	480,381			300,000	65,000		480,381								
11 Sep. '62	40.9			6.0	3.9	8	11	Saratoga and Schenectady	824,622	77,585		500,000	376,000	6,337	882,337								
11 Sep. '62	8.0			8.0		61		Saratoga and Whitehall	906,516	135,567		650,000	450,000	42,500	1,142,500								
11 Sep. '62	4.0			4.4		59		Second Avenue (New York)	877,684	209,625		750,000	25,000		1,089,317								
11 Sep. '62	13.0			0.4		2	6	Sixth Avenue (New York)	2,865,540	2,654		1,200,130	1,640,757	103,570	2,944,457								
11 Sep. '62	81.0			7.5		112		Staten Island	1,652,708	104,321		1,170,000	400,000		1,757,029								
11 Sep. '62	8.0			8.0		10	9	Syracuse, Binghamton & N.Y.	1,371,576	198,937		606,911	808,500	271,097	1,686,508								
11 Sep. '62	24.9			3.7				Third Avenue (New York)	452,500			325,000	180,000		462,500								
11 Sep. '62	18.6			2.7				Troy and Boston	752,601			80,000	680,000		752,601								
11 Sep. '62	2.1			2.1				Troy and Rutland	452,500			325,000	180,000		462,500								
11 Sep. '62	34.9			2.6	51.4	4	6	Troy Union	862,089			811,560			862,089								
11 Sep. '62	34.9			2.6	51.4	4	6	Utica and Black River	862,089			811,560			862,089								
11 May, '60	94.9			6.4				NORTH CAROLINA	2,157,503			1,545,225	400,000	276,272	2,419,401	94.9							
11 May, '60	223.0							Atlantic and North Carolina	4,235,000			4,000,000			238,000								
11 May, '60	97.0							North Carolina	1,240,241			973,300	126,200		2,069,177								
11 May, '60	161.5			15.0		23	18	Raleigh and Gaston	2,632,737			1,130,470	1,045,000	51,300	2,934,509								
11 May, '60	161.9					24	32	Wilmington and Manchester	2,869,223			1,340,213	791,055	102,391	3,114,954								
11 May, '60	81.0			3.0	192.5			Wilmington and Weldon	2,000,000			290,212		70,860	384,072								
11 May, '60	81.0			3.0	192.5			Western North Carolina	2,000,000			290,212		70,860	384,072								
11 Dec. '62	118.2					17	12	OHIO	613,231			866,939		77,294									
11 Dec. '62	137.0					41	39	Atlantic and Great Western	3,030,584		11,000	1,859,813	1,169,000	2,126	3,876,255								
11 Dec. '62	60.3					22	28	Bellevue and Indiana	5,579,508	922,670		100,133	1,628,356	3,073,000	1,126,458								
11 Dec. '62	30.0					22	28	Central Ohio	2,933,788	481,083	91,947	2,155,800	1,384,000		3,988,193								
11 Dec. '62	131.8					69.1	16	Cine, Hamilton and Dayton	6,250,841			2,441,176	3,062,000	228,973	131.8	304,168	190,745						
11 Dec. '62	135.4			55.8		29	32	Cine and Indianapolis Junc.	4,290,777	723,116	74,010	6,000,000	510,000		6,454,130								
11 Dec. '62	67.0					13	6	Cine, Wilmington and Zanesv.	2,553,162	298,759	23,340	1,036,035	1,752,400	128,857	2,917,322								
11 Dec. '62	95.5			1.2	29.5	31	34	Cleveland, Columbus and Cine.	3,452,143	590,344		2,300,000	1,500,000		484,297								
11 Dec. '62	101.1			102.6		45	39	Cleveland and Mahoning	7,386,091			3,832,712	4,324,005	94,329	8,251,646								
11 Dec. '62	102.1					32	40	Cleveland, Painesville & Ashabula	6,700,495	520,727	55,025	3,526,890	3,667,595		7,810,568								
11 Dec. '62	61.4					53.0	6	Cleveland and Pittsburgh	1,574,693			769,673	575,250	632,486	61.5	75,120	84,000						
11 Dec. '62	72.0					31.0	6	Cleveland and Toledo	2,555,000			1,000,000			72.0	144,000	17,760						
11 Dec. '62	64.5			10.4		13	11	Cine, Zanesville and Cin.	1,413,386	246,565	541,240	1,490,800	282,900		2,076,902								
11 Dec. '62	144.0			7.9		87.3	18	Columbus and Indianapolis	5,454,748	339,553	5,600	2,452,217	2,604,190	810,424	6,509,826								
11 Dec. '62	36.6					16	3	Columbus and Xenia	999,173	104,912		307,246	716,000	80,845	1,104,086								
11 Dec. '62	158.1					47.0	3	Dayton and Michigan	860,496			427,838	422,658		86,000								
11 Dec. '62	45.0					6	6	Dayton and Western	1,101,744	79,022	62,630	469,762	728,853	152,694	1,559,867								
11 Dec. '62	36.0					84.0		Dayton, Xenia and Belpre	888,000			300,000</											

RAILROAD SHARE LIST, including Mileage, Rolling Stock, etc., etc.

An asterisk (*) occurring in the column headed "Rolling-Stock," signifies that the cost is included in that of "Railroad and Appurtenances." A dash (—) signifies "nil." Running dots (....) signify "not ascertained." Land-Grant Railroads are in *italics*.

Years ending.	Railroad.				Equipment.			Companies.	Abstract of Balance Sheet.										Earnings.				Price of shares		
	Main Line.	Lateral and Branch Line.	2d Track and Sidings.	Road in progress or projected.	Cars.				Property and Assets.				Liabilities.				Balance Total, incl. all other assets and liabilities.	Road operated, incl. road leased etc.	Mileage run by locomotives with trains.	Earnings.					
					Engines.	Passenger.	Freight, etc.		Railroad and Appurtenances.	Rolling Stock.	Invested in foreign works.	Share Capital paid in.	Bonded and Mortgage Debt.	Floating Debt.	Gross.	Net.									
																				No.	No.	No.		No.	No.
31 Oct. '62	28.2	—	1.9	—	—	—	—	PENNSYLVANIA, (Continued.)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
31 Oct. '62	28.2	—	1.9	—	—	—	—	Philadelphia and Trenton	552,422	51,460	—	999,200	250,000	—	1,249,200	28.2	102,364	432,351	228,844	8	178	—	—	—	
31 Oct. '62	28.2	—	1.9	—	—	—	—	Phila., Wilmington and Balt.	6,979,924	744,426	3,1129	5,620,500	2,579,900	—	9,508,400	200.5	582,815	2,250,562	1,080,995	9	67	—	—	—	
31 Dec. '62	28.2	—	1.9	—	—	—	—	Pittsburg and Connellsville	2,038,181	109,202	—	1,763,122	1,600,000	—	119,417	3,601,853	72.0	194,000	129,918	60,379	8	—	—		
31 Dec. '62	28.2	—	1.9	—	—	—	—	Pittsburg, Ft. Wayne & Chicago	17,738,353	—	—	5,709,592	12,935,173	—	312,399	19,451,678	468.3	2,694,467	3,745,311	1,802,865	8	—	—		
31 Oct. '62	28.2	—	1.9	—	—	—	—	Schuylkill and Susquehanna	1,197,774	—	—	1,269,160	97,000	—	8,405	1,374,555	55.5	82,809	79,618	9,338	—	—	—		
31 Oct. '62	28.2	—	1.9	—	—	—	—	Schuylkill Valley	678,950	—	—	1,76,950	—	—	—	676,050	—	oper. by Ph. & R.	ending.	8	—	—	—		
31 Oct. '62	28.2	—	1.9	—	—	—	—	Shamokin Valley & Pottsville	1,173,773	112,824	—	500,000	791,597	5,659	1,297,256	—	57,928	159,534	99,000	4	39	—	—		
31 Oct. '62	28.2	—	1.9	—	—	—	—	Tioga	719,914	77,999	—	97,550	396,500	65,828	797,912	29.6	81,934	134,583	97,802	9	43	—	—		
31 Dec. '62	28.2	—	1.9	—	—	—	—	Westchester and Philadelphia	1,387,074	—	—	683,431	953,203	8,000	1,644,639	26.4	105,800	141,101	70,544	9	10	—	—		
1 Aug. '63	50.0	—	2.0	—	12	17	103	RHODE ISLAND.	2,158,000	—	—	1,508,000	256,800	—	—	62.0	237,700	415,309	199,155	6	55	—	—		
30 Nov. '62	13.6	—	0.5	—	4	3	7	N. Y., Providence and Boston	424,943	13,269	—	4,777	8,500	—	—	13.6	28,954	25,504	6,739	—	—	—	—		
31 Dec. '62	13.2	1.5	—	182.4	2	—	26	SOUTH CAROLINA.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
31 Dec. '62	13.2	1.5	—	182.4	2	—	26	Blue Ridge	2,126,539	601,615	—	1,916,515	217,577	—	2,134,092	13.2	—	—	—	—	—	—	—		
31 Dec. '62	13.2	1.5	—	182.4	2	—	176	Charleston and Savannah	801,615	34,372	250,000	708,366	195,266	—	1,097,906	51.9	—	—	—	—	—	—	—		
31 Dec. '62	13.2	1.5	—	182.4	2	—	176	Charlotte and South Carolina	1,719,045	—	—	1,201,000	384,000	—	1,096	—	—	283,263	151,536	6	—	—	—		
1 Jan. '69	143.2	21.3	—	—	—	—	—	Cheraw and Darlington	600,000	—	—	400,000	200,000	—	—	49.3	—	—	—	—	—	—	—		
31 Aug. '65	22.5	—	—	—	—	—	—	Greenville and Columbia	2,439,709	324,161	—	1,429,000	1,145,000	345,540	2,519,554	164.5	—	—	341,190	125,871	—	—	—		
31 July '68	32.0	—	—	—	—	—	—	Kings Mountain	196,230	—	—	200,000	—	—	200,000	22.5	—	—	—	—	—	—	—		
28 Feb. '69	102.0	—	—	—	—	—	—	Laurens	543,400	—	—	400,000	106,218	—	575,729	32.0	—	—	27,568	8,527	—	—	—		
31 Dec. '60	136.0	106.0	—	—	62	59	790	North-Eastern	2,011,852	—	—	985,743	960,410	108,172	2,057,325	102.0	—	—	220,014	96,145	—	—	—		
31 July '68	25.1	—	—	41.0	—	—	—	South Carolina	—	—	—	—	—	—	—	—	—	1,499,636	701,943	7	—	—	—		
30 Sep. '60	47.6	—	—	—	—	—	—	TENNESSEE.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
1859	—	—	—	—	17.0	2	—	Central Southern (Tenn.)	1,021,439	58,133	—	505,214	514,000	99,110	1,137,707	47.6	—	—	29,967	19,187	—	—	—		
1859	—	—	—	—	12	10	14	Edgemoor and Kentucky	837,947	—	—	333,204	612,000	60,900	—	30.0	—	—	9,359	7,488	—	—	—		
1859	—	—	—	—	10	10	125	East Tennessee and Georgia	3,037,367	—	—	1,289,973	2,020,000	200,000	—	140.0	—	—	318,718	187,466	—	—	—		
1859	—	—	—	—	43	37	687	East Tennessee and Virginia	2,310,933	153,284	—	536,654	1,902,000	390,407	—	130.3	150,142	297,806	149,167	—	—	—	—		
1859	—	—	—	—	9	5	242	Memphis and Charleston	5,896,578	878,069	129,364	3,809,949	2,659,000	260,112	7,627,797	291.0	—	—	1,635,096	873,597	—	—	—		
1859	—	—	—	—	100	000	—	Memphis and Ohio	2,289,267	141,144	—	570,000	1,361,000	145,000	—	—	—	—	—	—	—	—	—		
1859	—	—	—	—	40.1	7	5	Memphis, Clarksv. & Louisv.	2,000,000	100,500	—	298,721	740,000	—	—	—	—	—	—	—	—	—	—		
1859	—	—	—	—	4	5	119	Mississippi and Tennessee	1,137,400	—	—	798,285	554,949	515,518	—	59.4	69,870	177,256	60,029	—	—	—	—		
1859	—	—	—	—	15	2	81	Mississippi Central and Tenn.	892,710	82,908	—	317,447	632,500	22,369	—	47.4	54,175	83,129	44,666	—	—	—	—		
30 Nov. '60	149.7	44.0	—	—	39	17	819	McMinnville and Manchester	633,307	56,816	—	144,894	406,000	5,000	—	34.2	30,065	23,808	13,892	—	—	—	—		
1859	—	—	—	—	—	—	—	Nashville and Chattanooga	3,682,882	—	—	2,056,544	1,731,000	—	—	159.0	—	—	734,118	337,384	6	—	—		
1859	—	—	—	—	—	—	—	Nashville and Northwestern	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
1859	—	—	—	—	5	5	32	Tennessee and Alabama	76,016	76,016	—	595,922	860,000	204,544	—	46.8	57,950	127,953	87,243	—	—	—	—		
1859	—	—	—	—	0.6	8.0	—	Winchester and Alabama	—	—	—	216,962	413,000	408,477	—	30.0	—	—	1,248	—	—	—	—		
—	32.0	—	—	158.0	—	—	—	TEXAS, (all aided by State.)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
—	32.0	—	—	158.0	—	—	—	Buffalo Bayou, Braz. & Col'do	—	—	—	—	—	—	—	32.0	—	—	—	—	—	—	—		
—	32.0	—	—	158.0	—	—	—	Galveston, Houston & Henderson	—	—	—	—	—	—	—	56.0	—	—	—	—	—	—	—		
1 May '60	70.0	—	—	280.0	7	8	124	Houston and Brazoria	1,250,000	—	—	275,000	240,000	171,523	—	50.0	31,300	32,670	—	—	—	—	—		
—	28.0	—	—	110.0	—	—	—	Houston and Texas Central	4,232,546	—	—	455,000	975,000	389,000	—	70.0	102,200	282,846	106,568	—	—	—	—		
—	28.0	—	—	110.0	—	—	—	San Antonio & Mexican Gulf	—	—	—	—	—	—	—	25.0	—	—	—	—	—	—	—		
—	28.0	—	—	110.0	—	—	—	Southern Pacific	—	—	—	—	—	—	—	28.0	—	—	—	—	—	—	—		
31 Aug. '63	110.5	—	6.6	—	8	12	190	CONNECTICUT & PASSUMPSOT RIVERS	1,783,542	195,647	—	1,230,400	800,000	—	—	90.7	91,639	208,837	—	—	—	—	—		
31 Aug. '62	110.6	—	6.6	—	20	18	548	Rutland and Burlington	3,989,708	556,275	—	2,233,376	3,183,038	603,019	6,579,434	119.6	394,393	822,928	61,280	—	—	—	—		
31 May '62	62.5	—	4.0	—	12	9	168	Rutland and Washington	990,000	221,053	—	1,097,000	—	—	—	62.5	133,293	140,888	24,579	—	—	—	—		
31 May '62	117.0	2.0	—	—	41	35	889	Vermont Central	8,402,055	—	—	5,000,000	3,500,000	1,500,000	—	174.5	679,677	713,415	191,466	—	—	—	—		
30 Jan. '62	47.0	8.6	4.1	—	—	—	—	Vermont and Canada	1,676,500	—	—	1,375,500	—	—	—	—	—	—	—	—	—	—	—		
30 Jan. '62	23.7	—	0.9	—	3	6	59	Vermont Valley	1,214,274	89,612	—	516,164	793,200	110,145	—	23.7	63,041	45,4							

to be its business, and what the programme of the French Emperor. Austrian funds have depreciated 5 per cent since the promulgation of the speech, and the posting of the autograph letters. The shares of the great Frankfort Bank (which is an indicator of the Commercial feeling of the Germans,) also receded to the same extent, and the differences in the Zollverein are melting away into a harmonious agreement in the presence of apprehended danger. The rate of interest has everywhere advanced, and the bullion market is disturbed.

The British Government is obliged to draw on India to stop the export of specie, and rupee bills (paper currency in no particular favor) are also to be substituted for gold. So we see that Europe has its own financial difficulties, enhanced by the avowal that the French Government will shortly have to offer for a heavy loan. In connection with this is another curious circumstance that has probably much to do with the revenue of the Empire. It is known that there has been a large quantity of tobacco belonging to its Government lying in the Richmond warehouses, paid for before the war, but not delivered. It is believed that after much negotiation Mr. Seward has consented to its exportation as an act of grace, and a fleet of French transports is announced as about to proceed up the James river to take it on board and convey it to France, where its arrival will be equivalent to the receipt of a large remittance of money. It is doubtless well known to our readers that tobacco is a monopoly of the French Government, and that its sale produces a large amount to its Treasury, as it evolves a duty from every whiff escaping from French lips. When we get our volume of correspondence from the State department, we shall be able to see how the affair has been managed. We notice among the contents of *le Livre jaune*, which except in the color of its binding, answers to the English Bluebook, there are no less than twelve documents relating to American affairs, from one of which it is ascertained officially that *France does not seek for any acquisition in America for herself or any one else*. Hence the tobacco is allowed to depart, and with this aid to Mr. Fould's budget, Louis Napoleon may feel stronger in his European policy. It will pay interest if it does not discharge the principal of the new debt.

All this foreign difficulty will probably have some effect on our own financial situation. We hope that our importers will not trust to foreign bills to the extent of many millions at a time, for a general war in Europe or a revolution in France might cause some of them to be returned.

We have therefore great reason to be satisfied with our own easy market with this large war on our hands. It demonstrates beyond a question the matchless ability of our countrymen, and the immensity of our national resources, that we are able to carry on our business with so little disturbance, and that if we are not in our normal condition of health, it is not exhaustion which troubles us.

The article of all articles, gold, before which so many are inclined to prostrate themselves if not to worship it, has had its infallibility somewhat disturbed of late in our market. If it falls 10 per cent., in a short time at the intelligence of one victory, what will it be worth when we have conquered the rebellion? We are inclined to the opinion

we have frequently expressed, that the high price paid for gold is unnatural and unjustifiable. It is true the export of gold to England at this moment pays a small profit, but it is a very small one. Other articles pay much better. The Secretary of the Treasury, or the associated city banks of New York could break down the rate any day they chose, with the utmost ease and without any loss. Five millions put upon the street would break all the operators in a row, and the sellers after realizing a large profit could take it in again on their own terms. The bare possibility of such an event should produce greater caution than is at present apparent in Wall street. We notice in a late number of the *San Francisco Mining Journal*, that the products of the California mines continue large, and that \$5,000 per ton is not an unusual yield. It is easy to see that there is not to be any falling off in this National staple, come what may. And yet it is a singular and suggestive fact, that in California, where paper currency is as yet excluded from circulation, the rate of interest remains where it has long stood, from $1\frac{1}{2}$ to 2 per cent. per month on the best security. This rate, if usual on the Atlantic coast, would break up one half our commercial enterprises. Paper therefore is not to be despised, especially when we are carrying on a contest for our unity and our national existence.

The Share Market has been disturbed of late, and the speculations of the press are as diverse as their interests and ownerships, for it is well understood the money articles in many of them are written with reference to private interests. Thus some predict a large increase of paper money, and call for it; others reject the idea of its necessity or propriety, and warn the public against a fearful crash when the restrictive policy of the Government is more developed. It is understood that legal tender bonds bearing interest are to be used as far as possible, in place of the present legal tenders, and that our soldiers are to be asked to take them in their stead. As it is a notorious fact that very large amounts of soldiers' pay are sent home for investment, and the support of their families, we therefore do not see why they should not receive them at first hands, viz., at the hands of the Government through their paymasters. Contractors also, who are making large sums out of the war, could not with any decency of conduct refuse to receive a portion of their profits, at least in this kind of currency.

The railroad Share Market has also been disturbed. Large sales of Erie have been made to secure the late advance, and a cash movement in Central, to the extent of 7,000 shares and upwards within the last few days, evidently for the purpose of obtaining additional votes at the election for directors now close at hand. The stockholders of the Harlem have agreed to issue the unsold shares of the company two millions and more, by which the capital will be increased to eight millions as it was originally intended to be. If the amount thus raised is judiciously applied to the construction of a double track to Albany, the Harlem will be a first class trunk road, and by its connection with the Central will enjoy an enormous freight and passenger business, which cannot but place it in a dividend paying position. But it remains to be seen at what price the new issue of stock can be put upon the market. The conversions into

the 5-20's continue large. On Tuesday \$1,498,500 were received. The receipts at the Custom House also continue large. During the last month, the New York office received \$5,115,500 against \$3,018,000 in November, 1863. The aggregate income from customs this year will, it is confidently expected, reach the sum of \$70,000,000, while the interest on the public debt thus far is but about \$48,000,000.

The last week's exports of Domestic Produce and Miscellaneous Goods (exclusive of specie) from this port, were to the value of \$3,251,634, against \$3,903,918 same week last year, and \$2,849,445 the corresponding week of 1861.

One hundred and thirty-three national banks have thus far been established, with an aggregate capital of \$20,917,500.

There is a good supply of money at 7 per cent., and Government stocks maintain their standing. The public are anxiously waiting for the usual annual reports of the National departments, and we venture to predict that Mr. Chase will produce a budget which will give great satisfaction to the country.

The coupons due December 1 of the Milwaukee city readjustment bonds will be paid on presentation to W. Schall & Co., in this city.

The Lehigh Coal and Navigation Company have declared a dividend of three per cent., payable on demand, less the National tax.

The interest due 1st December on the first mortgage bonds of the Pittsburgh Coal and Railroad Company will be paid, at the office of Geo. T. M. Davis, 47 Exchange place.

The principal and accrued interest of the San Francisco Water Works bonds, due April 1, 1864, will be paid at the office of Duncan, Sherman & Co., in this city.

The coupons due December 1, on the first mortgage bonds of the Staten Island Railroad Company will be paid at the office of the company, No. 3 Bowling Green.

The interest due, December 1, on the bonds of the New York and New Haven Railroad will be paid after that day at the Bank of the Republic.

The firm of Read & Lathrop is dissolved by the decease of Mr. Read. The business will be continued by the new firm of Lathrop & Mott, at the office, 40 Wall street.

Messrs. Robert Yelverton, W. Wallace Merriam and Theodore Ames have to-day been received as partners into the well known Stock Exchange firm of Merriam & Bell, 18 William street.

Mr. Robert L. Cutting, an old member of the New York Exchange Board, has formed a partnership with his son, Mr. Robert L. Cutting Jr., under the style of R. L. Cutting & Son.

Messrs. Talcott Brothers and Mr. R. K. Holdane have formed a new stock firm at No. 66 Beaver street, under the style of Holdane & Talcotts.

Messrs. Livermore, Clews & Co. have removed to their new and spacious office No. 32 Wall street. The improvements made by the new firm have converted the premises into one of the finest banking houses on the street.

By telegraph from San Francisco, to Ross, Dempster & Co., dated 26th Nov., Mining Stocks were quoted:

Ophir, \$16 25 per foot; Gould & Curry, \$46 per foot; Surage, \$28 asked; Potosi, \$11 per foot; Yellow Jacket, \$9 50 per foot; Central \$13 per

foot; Overman, \$4 30 per foot; Sierra Nevada, 75c. per foot; Burning Moscow, \$1 80 per foot; Crown Point, \$10 per foot; California, \$8 per foot; Best & Belcher, \$6 per foot; Grass Valley, 70c. per foot.

The well known Flour Exchange firm of Messrs. A. W. Greenleaf & Co., in Exchange place, temporarily retire from active business, in favor of the new firm, Messrs. Stimson, Frank & Co., who occupy their old office, No. 44 Exchange place. Mr. Frank is a member of the Stock Exchange, and for the last two years has represented Messrs. Greenleaf at the Board.

The following quotations of sales of Railway and other securities are in addition to those given elsewhere in our columns:—

New York.—Peninsular R. R. 1st mort., 80; Little Miami, 140; Goshen Branch bonds, 104; North Carolina 6s, 59; Kentucky 6s, 104; Illinois Coupon bonds, 1877, 103½; Brooklyn City Water Loan, 109; Wyoming Valley Coal, 96½; Bucks Co. Lead, 1½; Continental Bank, 100; N. America, 109; Importers' and Traders, 108; American Exchange, 108; Commerce, 105½; National, 104.

Philadelphia.—Pittsburg 6s, Municipal, 90; Camden and Amboy mort. loan, 106; Junction R. R. 6s, 106; Central Ohio R. R. shares, 10; Huntington and Broad Top, 20; do., 1st mort., 101½; Philad., Wil. and Balt. R. R., 67½; Delaware R. R. guar. bonds, 102; West Branch Canal, 110; Union Canal, 2; North Penn. scrip, 90; West Philadelphia R. R., 70½; Ridge Avenue, 2½; Girard College, 27; 17th and 19th streets, 11½; Penn. Mining, 4¾; Green Mountain, 6; Locust Mountain, 32; Big Mountain, 4¾; Southwark and Moyamensing Gas, 10¼; Farmers and Mechanics' Bank, 59; Western, 65; Mechanics, 27¼; Philadelphia, 125; Commonwealth, 53½; Girard, 45½; North America, 151½; North Kentucky Bank, 104. The latest quotations are: City 6s, 101@101½; do., new, 104@105; State 5s, 99½@100; Reading, 60¾@60¾; do., 6s, 1870, 106@107; do., 1886, 120@122; Camden and Amboy, 165@172; Pennsylvania R. R., 71@71¼; do., 1st mort., 108½@110½; do., 2d mort., 105@106½; Little Schuylkill R. R., 50@50¼; Morris Canal, 72@74; do., pref., 137@138; Susquehanna Canal, 15½@15¾; do., 6s, 63@65; Sch. Nav., 17@18; do., pref., 32¾@33; do., 6s, 1882, 89@89½; Union Canal bonds, 26@26½; Delaware Div. Canal, 40; do., bonds, 103; Elmira and Williamsport, 35@37; do., pref., 52@54; do., 7s, 1873, 109; Beaver Meadow, 77@78; Harrisburg, 71@72; Long Island R. R., 40@42; Lehigh Coal and Navigation, 60@61; do., scrip, 49@49½; North Pennsylvania, 21½@22; do., 6s, 95¾@96; do., 10s, 121½@122; Philadelphia and Erie, 29½@29¾; do., 6s, 104@104¼; Minehill, 60¾@60¾; Catawissa, 9¼@9¾; do., pref., 29¼@29½; Lehigh Valley, 84¼@84¾; do., bonds, 107; Frankfort and Southwark (horse), 58@60; Second and Third, 83@85; Race and Vine, 18@19; West Philadelphia, 70@71; Spruce and Pine, 13@14; Green and Coates, 44½@46; Chestnut and Walnut, 58; Arch, 31@32; Thirteenth and Fifteenth, 34; Seventeenth and Nineteenth, 11¼@11½; Girard College, 26¾@27; Tenth and Eleventh, 47; Norristown, 58½@58¾; Lombard and South, 16; Ridge Avenue, 21½.

Boston.—Northern (Ogdensburg), 1st mort., 100¼; 2d mort., 28; Rutland and Burlington 1st mort., 65; do., 3d mort., 3; New York and Boston

Air Line, 18; do., 6s, 65; Michigan Central 8s, 1869, 120; Eastern R. R. 6s, 1874, 103; South Shore R. R. 6s, 1880, 96¼; Vermont Central, 1st mort., 77; Old Colony and Fall River R. R. 5s, 1867, 99¾; Cheshire R. R. 6s, 1880, 101¾; Massachusetts State 6s, 1876, 117; Vermont 6s, 1874, 104¾; Maine 6s, 1880, 106½; New Hampshire 6s, 1868, 101¾; do., 1874, 105; Boston City 5s, 1882, 109; do., 1884, 112¾; Roxbury 5s, 1879, 96½; Bath 6s, 1870, 101¾; do., 1891, 108½; do., 1890, 103; Portland 6s, 1877, 102; Albany 6s, 101; do., 1876, (W. R. R.) 104¼; Bangor 6s, 1876, 102¼; Ct. and Pas. River pref., 49¾; do., 6s, 101; Malden and Melrose 6s, 1880, 95¾; Boston Water Power Co., 47¾; Cary Imp. Co., 10; East Boston Co., 13¾; Essex Co., 89; Waverly Co., 2¾; Union Steamship Co., 158; Boston, Newport and New York Steamboat Co., 1035@1040; Boston and Roxbury Mills, 60; Dorchester Gas, 67½; Boston Gas, 850; Cambridge Gas, 109; Lorberry Coal, 68½; Franklin Coal, 128½; Boston Music Hall, 60; Boston Athenæum, 100; Mercantile Marine Ins., 111; City Fire Ins. Co., 56; Union Bank, 116; Blackstone, 106; Merchants' 98; Bank of Commerce, 100; North Bank, 97; State Bank, 74¼; City Bank, 102¾; Bank of Republic, 98; Harvard Bank, (Cambridge,) 103¼; Oxford Plumbago Mining Co., 75; Hampton Mining and Smelting Co., 2½; Acton Mining Co., 4¼; Albany and Boston, 13¾; Algonah, 2½; Bolton, 2¾; Broome, 22½; Boston, 6; Bay State, 19; Black River, 50c.; Bohemian, 8; Columbian, 8¼; Copper Falls, 28; Canada, 1½; Chaudiere, 3½; Colorado, 5¾; Dana, 4¼; Dudley, 4¼; Dacotah, 5¼; Flint Steel, 9½; Great Western, 4; Hancock, 13; Hancock, 4¼; Huron, 31½; Mesnard, 13; Mandan, 3½; Madison, 6¾; Manhattan, 4½; New England, 3¼; Norwich, 6½; North Western, 9¾; Native, 4½; Naumkeag, 7¼; Ottawa, 40c.; Phoenix, 25; Pontiac, 7; Star, 6¼; St. Mary's, 11; Superior, 10¼; South Side, 5½; Tremont, 4¾; Toltec, 3¾; Wickham, 75c.; Winthrop, 6½; West Minnesota, 77½.

Baltimore.—N. W. Va. 1st mort., 105½; Central Ohio shares, 10; Santa Clara Mining Co., 8; Springfield 2.10; Silver Valley, 10; Balt. and North Carolina, 20; George's Creek, 71; Farmers' and Mechanics' Bank, 39½; Union Bank, 73½; Marine Bank, 30¼. The latest quotations are: Balt. and Ohio, 98¼@94½; do., 6s, 1867, 104; do., 1875, 108@109; do., 1880, 107; do., 1885, 106@107; Northern Central, 41@42½; do., bonds, 1885, 104¼@104¾; N. W. Va., 9½; do., 1st mort., 105@110; do., 2d mort., 102; do., 3d mort., 25@27; do., do., guar., 101; Central Ohio 2d mort., 104@112; do., 3d mort., 75; do., 4th mort., 43½@50; do., income 1857-'60, 35¾; Western Md. bonds, 82@83; do., guar., 107@110; Maryland 6s, coupon, 1870, 110½@112¼; do., Ins., 115; do., 1890, 112; Baltimore 6s, 1870, 100; do., 1873, 106; do., 1875, 108¼@108½; do., 1886, 109¾; do., 1890, 109½@109¾; do., coupon, 108½@109; do., 5s, 1888-'70, 100; City Passenger R. R., 18@19.

The Philadelphia Inquirer says:—"They have commenced shipping coal from the Green Mountain under a royalty of forty cents per ton, and as the Company is free from debt, the whole of the receipts will go to the stockholders."

Penn. Mining Company.

The par value of the stock of the Penn. Mining Co. is \$25 per share, on which there has been paid \$2½ per share. The whole amount of shares is 20,000. The Company, which was chartered by the Legislature of Michigan in 1859, owns three thousand acres of land in that State, in which are included the old Algonquin Copper Mines. The breaking out of the rebellion diverted attention from the property, but recent examinations indicate the presence of copper in various parts of the tract, which is now being energetically explored by competent engineers with flattering promise. It, of course, has never paid a dividend. The Company, we learn, is entirely free of debt, and has now \$12,000 in its treasury.

SPECIAL CAUTION TO

Railroad Companies & Car Spring Manufacturers.

Notice is hereby given that the Metallic Car Spring Co. of New York are the sole assignees of the Patent granted to Richard Vose of New York, March 11, 1862 (re-issued Feb. 24, 1863) for an improvement in Steel Spiral Springs; that they thereby own the entire and exclusive right of making, using, and vending to others to be used, any form whatever, of Steel Spiral Spring which is protected from entire exhaustion and from contact of Steel against Steel by mean of the interposition of India-rubber, wool, or other elastic gummy, or fibrous substance between its coils; and that they will hold responsible and prosecute for damages, all persons who may either make, use or vend Spiral Spring packed as described.

RICHARD VOSE,
Sec'y Metallic Car Spring Co.,
No. 54 William st., N. Y.

Big Mountain Coal Co.

The Big Mountain Coal Company's property is situated at Shamokin Coal Township, Northumberland County, Pa., and consists of 2,187 acres of coal lands, 3,400 acres of timber lands, 1½ miles of locomotive road, and another mile in course of construction. One colliery leased and been in operation for years, which would have produced 100,000 tons this year, if cars sufficient could be had to bring it to market. Two new leases have been made this year, one of which will be in operation immediately after Jan. 1, 1864, and the other as soon as a tunnel can be made to approach the coal. When these three are in full operation, 250,000 tons can be got to market per annum, leaving a place for two more collieries for leasing. The coal, which is anthracite, both red and white ash, is brought to market by rail to Sunbury via Elmira, down Northern Central Railroad to Baltimore, and over Minehill Road to Philadelphia. The Company has \$31,000 bonded debt, no floating debt; 60,000 shares of stock, par \$25, paid \$10. Is a full paid stock; no more instalments will be called. The office of the company is at 320 Walnut st., Philadelphia.

The Kennebec and Portland Railway receipts last year were \$279,734, against \$205,841 for the preceding year. The Williams' debt, \$91,460, has been paid off; the Cumberland and Oxford Canal from Portland Depot to Vaughn's Bridge and a lot of contiguous ground purchased, securing right of way and connection with Western roads. It is proposed to expend \$70,000 on the Portland terminus, and \$10,000 at Bath.

Railroads in Missouri.

We see it stated that efforts are being made in Missouri to transfer the obligation of meeting the interest upon the bonds directly to the Railway Corporations to whom they were originally issued, and upon whose lines of road they are a first mortgage lien. Several of their lines, besides the Hannibal and St. Joseph, which has always provided the interest on the \$3,000,000 issued for its construction, are now in profitable operation. Others are partially earning the State interest. In his message of the 10th ult., to the Legislature, Gov. Gamble says:

"In relation to the railroads I have only to say, that I have so recently received any of their reports that I am unable to give any statement of their condition and prospects. There is one singular fact in relation to the Iron Mountain Railroad to which I would call your attention. It is, that the Company, having a surplus of the earnings over the expenses of their road, have thought that they were under obligations to pay into the State Treasury a portion of that surplus, to be applied to the interest upon their bonds. Although the sum thus paid is small, yet it indicates a willingness to do something for the restoration of the credit of the State, and in that respect differs from the course pursued by other roads, which have been in default.

"As all the roads have their officers regularly in attendance upon each session of the General Assembly, no doubt their condition will be represented by persons so in attendance, and while I have no plan to suggest to you in relation to the roads, I earnestly recommend that the speedy restoration of the credit of the State may be steadily kept in view in any measures that may be adopted."

Schuchardt & Gebhard,
BANKERS,
21 NASSAU ST.,
NEW YORK.

BILLS OF EXCHANGE

At sight or 60 days on all the principal cities of Europe.
LETTERS OF CREDIT for travellers in Europe,
and also COMMERCIAL CREDITS.

I. KENDRICK,
No. 125 WALNUT ST., PHILADELPHIA,
AGENT OF THE
UNION COAL & OIL CO.
OF MAYSVILLE, KY.,
FOR THE SALE OF THEIR

Paraffine Lubricating Oil,

FOR ALL CLASSES OF
STATIONARY MACHINERY, LOCOMOTIVE ENGINES,
RAILROAD CARS, COTTON SPINDLES,
SEWING MACHINES AND WOOLEN FACTORIES.

ALSO,
MAYSVILLE COAL OIL
FOR BURNING,
PARAFFINE WAX,
PARAFFINE WAX CANDLES, AND
ROLLING MILL GREASE,
FROM PURE CANNEL COAL.

P.S.—All Oils warranted to answer the purpose represented.

Particular attention given to orders for shipment in cans or barrels.

UNION
STEAM AND WATER
HEATING COMPANY,
FOR WARMING AND VENTILATING
PUBLIC BUILDINGS, PRIVATE RESIDENCES,
GRAPERIES, GREENHOUSES, ETC.,
UNDER GOLD'S IMPROVED PATENTS.

PRINCIPAL OFFICE, 634 BROADWAY,
NEW YORK.
T. F. BRINSMADE, Agent.

ALEXANDER'S
ROOFING
CEMENT-PAINT

FOR
Railway & Steamboat Co's,
BUILDERS and BUILDINGS generally.

THIS PAINT is warranted not to Crack or Scale either on Wood, Iron, Tin, or Canvas.
The ingredients in its composition are all of a preserving and protective nature. This Paint is now extensively used by Railway Companies and pronounced much cheaper, more durable and satisfactory than what was previously used. It is 2-3ths heavier in body than any other Paint.
Give this Paint a trial, and if not found as represented no charge will be made for it.
Send for descriptive circular and references.

W. G. PERKINS, Gen'l Ag't,
271 Broadway,
NEW YORK.

NEW ENGLAND
MUTUAL LIFE
INSURANCE CO.

CASH ACCUMULATION, \$2,500,000.
Clear Surplus, \$1,250,000.

WILLARD PHILLIPS, Pres. B. F. STEVENS, Sec.

DIRECTORS.
Charles P. Curtis, William B. Reynolds,
Thomas A. Dexter, Geo. H. Folger,
Marshall P. Wilder, Francis C. Lowell,
Sewell Tappan, James S. Amory,
Charles Hubbard, Homer Bartlett.

The oldest and most reliable wholly Mutual Company in the United States, established in Boston 1843, and uniformly successful. DIVIDENDS paid in cash. Send for documents—supplied gratis.

JOHN HOPPER, Agent,
110 Broadway, cor. Pine st

The Mercantile Mutual
INSURANCE
COMPANY,

No. 35 WALL ST., NEW YORK.

INCORPORATED, APRIL, 1843.

ASSETS OVER \$1,250,000.

MARINE and Inland Transportation risks on Vessels.
Freight and Merchandise insured on the most favorable terms.
Policies are issued, loss, if any, payable in Gold, or at the office of RATHBONE, BROTHERS & CO., Liverpool, if desired.

Parties effecting insurance at this office may participate in the Scrip dividend of profits, or receive an equivalent cash discount, at their own option.

The risk of war covered at the lowest current rates.

ELLWOOD WALTER, Pres't.
CHAS. NEWCOMB, Vice Pres't.
C. J. DESPARD, Secretary.

PARTICIPATION.

AETNA
Fire Insurance Company
of New York,

CASH CAPITAL, \$200,000. No. 170 Broadway. CHARTERED 1824.

INSURES Buildings, Merchandise, Household Furniture, Vessels in Port and their Cargoes, etc., against Loss or Damage by Fire, on the most favorable terms, also, Inland Navigation & Transportation Risks.

The Insured receive 75 per cent of the Net Profits annually, without incurring any Liability. When preferred, discount will be made in lieu of participation in Profits.

SCRIP DIVIDEND OF 1861 50 per cent.
SCRIP DIVIDEND OF 1862 50 per cent.
JACOB BROUWER, President.
LIVINGSTON SATTERLEE, Sec'y.

SAFEST AND CHEAPEST SYSTEM OF INSURANCE.

Scrip Dividend for 1861 60 per cent.
Scrip Dividend for 1862 60 per cent.

Washington Insurance Co.,
172 Broadway, cor. Maiden Lane.

Assets Feb. 1, 1863 \$528,521 51
Contingent Liabilities 5,000 00

Cash Capital and Surplus \$523,521 51

INSURES Buildings, Merchandise, Furniture, Rents, Leases Cargoes and other Insurable property, against loss or damage by Fire, and INLAND MARINE RISKS, on the Lakes, Rivers and Canals.

Three-fourths of the Profits divided annually to the Insured without their incurring any liability whatever.
GEORGE C. SATTERLEE, Pres't.
HENRY WESTON, Vice-Pres't.
WM. K. LOTHROP, Secretary.

OFFICE OF THE
COLUMBIAN (MARINE)
INSURANCE
COMPANY,
Corner of WALL and NASSAU Streets.

CASH CAPITAL \$1,000,000

Total Assets, June 2nd, 1863, less } \$2,008,651 03.
Losses adjusted and paid, }

LOSSES PAID IN GOLD
Upon RISKS on which the PREMIUM is paid in like Currency.

DEALERS with this Company will be allowed the option (to be signified at the time of application for insurance) of receiving in lieu of scrip, at the end of each year, Returns in Cash, of premiums paid and earned during the year, upon all new risks under the New York form of policy, as follows:

1st. Upon every OPEN policy (CARGO RISKS) upon which there shall have been earned and paid \$300 and upwards, a return of TWENTY PER CENT.
2d. Upon other voyage risks upon cargo and freight, a return of FIFTEEN PER CENT.
3d. Upon time risks upon hulls and freight, a return of TEN PER CENT.

Such privilege, however, being confined to persons and firms, the aggregate of whose premiums upon such policies earned and paid during the year shall amount to the sum of One Hundred Dollars.

B. C. MORRIS, President.
THOS. LORO, Vice-President.
WM. M. WHITNEY, 2d Vice-Pres't & Sec'y.

BRASS SWITCH LOCKS,

MARKED with Initials of Road, with chains and keys. EXTRA LOCKS AND KEYS—when ordering Locks and Keys to match others, enclose key in letter.

WILLIAMS & PAGE,
67 Water street,
BOSTON.

SUBSTITUTE FOR CAR DUCK.

Kingman's Car Covering.

THIS is a heavy Canvas imbedded in a coat of Elastic Mastic or Paste which is applied directly to the boarding of the top of the car, and then thoroughly painted with three or four coats of paint, thus making a covering VERY MUCH LIKE CAR DUCK, but at this time at half the cost. It is now successfully used by many Railroads and Car Builders. Directions and particulars sent when requested. This Mastic and Canvas for sale by

WILLIAMS & PAGE,
67 Water street,
Boston.

March 1903.

CALIFORNIA AND NEVADA MINING STOCKS.

THE undersigned will buy and sell on commission, through their San Francisco House, all Stocks pertaining to the Pacific Coast. Orders promptly filled. Quotations by telegraph furnished to parties desiring them.

ROSS, DEMPSTER & CO.,
No. 24 Liberty st., New York.

SMITH'S Railroad Air Light Comp'y.

THIS COMPANY OWNS THE EXCLUSIVE RIGHT of SMITH'S AIR LIGHT FOR RAILROADS, and is prepared to sell to Roads the right to use the same. We have arrangements perfected for furnishing Lamps and Burners at about the same price charged for the Oil and Kerosene Lamps by other Manufacturers.

That Railroad Managers may know the value of this LIGHT, we annex letters from the Hon. CHAUNCEY VIBBARD, the General Superintendent of the New York Central Railroad, and also from the Master Mechanics of the same road, showing its comparative cost with that of Oil Lights:

NEW YORK CENTRAL RAILROAD,
GENERAL SUPERINTENDENT'S OFFICE,
ALBANY, November 15, 1892.

TO THE MANAGERS OF RAILROADS:

Gentlemen,—This Company has adopted and is furnishing all their locomotives with the "SMITH AIR HEAD LIGHT." They do this both on account of economy and the very superior light it affords.

We regard it as vastly superior to any light that has ever been produced, and commend it to the consideration of railroad managers.

Very respectfully, etc.,

C. VIBBARD, Gen'l Sup't.

NEW YORK CENTRAL RAILROAD,
MASTER MECHANIC'S OFFICE,
WEST ALBANY, January 28, 1893.

DR. GEORGE HAND SMITH:

Dear Sir,—Below please find the cost of locomotive lamps burning oil on this division.

Supposing oil cost \$1.57 per gallon.

Cost per hour, 5 cents.

Cost of wicks chimneys, per year, \$4.80.

Estimate cost of leakage, gumming and overflow, one-fourth of the consumption.

In the year 1891, when the lamps were all oil burners, the cost of repairs was \$10.20 per year.

You will please add the overflow to the actual cost per hour, which would make 6.25 per hour.

Your most obt. servant,

EDWARD H. JONES,

Master Mechanic, Eastern Division.

300 days, 5 hours each day, 1,500 hours, 6 1/4 c. per hour . . . \$93 75
Repairs of lamps for one year . . . 10 20
Wicks and chimneys . . . 4 80

\$108 75

NEW YORK CENTRAL RAILROAD,
MASTER MECHANIC'S OFFICE,
ROCHESTER, Feb. 2, 1893.

DR. GEORGE HAND SMITH:

Dear Sir,—In answer to your inquiries in reference to your Air Light, I would state that we have upon this division of the road 23 of your lights on our first class passenger and freight engines. I find the light consumes about five feet of common gas per hour, which, at the price of gas at this place, 32 1/2 c. per thousand, makes the cost of light for each engine 1 1/4 cents per hour.

Renewing my often expressed opinion that your light, for its reliability, its economy and superiority, far exceeds any light heretofore used on engines,

I remain, very truly, yours, etc.,

DAVID UPTON,

Master Mechanic, Western Division.

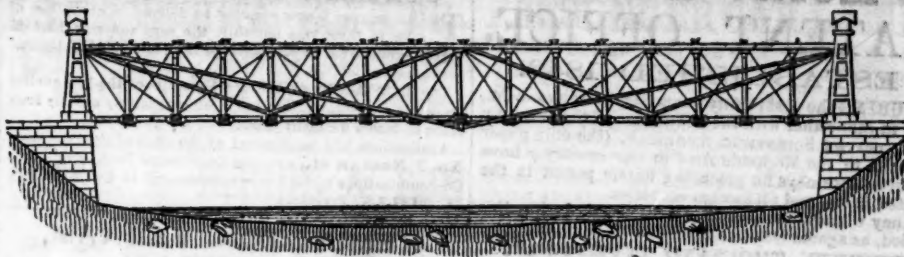
300 days, 5 hours each day, 1,500 hours, 1 1/4 c. per hour . . . \$18 75
One-sixth waste of gas . . . 3 12
Repairs of lamps for one year . . . 5 00

\$26 87

Further information may be obtained at the office of the Company, 21 Nassau st., or by addressing

CHAS. W. WELSH,
Secretary.

FINK'S PATENT IRON RAILROAD BRIDGE.



THE undersigned is prepared to manufacture and build in any part of the United States and Canada, at reasonable terms, FINK'S PATENT IRON BRIDGE in spans from 20 to 300 feet. The same is favorably known, well tested and already extensively introduced, is stronger and more economical than any other Bridge now in use, requires no repairs, and no adjustment, but is perfectly adjustable. For plans and particulars apply to

C. J. SCHULTZ,
Letter-box No. 1,392, Pittsburg, Pa.

DAVISON, DICKINSON & CO., CIVIL, MINING AND MECHANICAL ENGINEERS,

No. 229 BROADWAY, NEW YORK,
AGENCY, No. 58 BALTIMORE STREET, BALTIMORE, Md.

PLANS AND SPECIFICATIONS FURNISHED FOR ALL KINDS OF MACHINERY, and superintended during construction. RICE HULLERS, CLEANERS and POLISHERS. GAS WORKS ERECTED ON THE MOST APPROVED PLANS. New and Second-hand MACHINERY constantly on hand. IRON BOUGHT AND SOLD ON COMMISSION.

SOLE AGENTS FOR BATES' STEAM GAUGE.

MANUFACTURERS OF MARINE CLOCKS, STEAM ENGINE REGISTERS, INDICATORS AND GAUGES, ALSO IRON PIPE, FITTINGS, BELTING, HAIR AND WOOL FELTING.

HENRY J. DAVISON. WM. LEE STILES. P. P. DICKINSON.

Government Securities.

OFFICE OF

A. H. ALMY,
CONTINENTAL BANK BUILDING,
No. 7 NASSAU ST.

ORDERS for the various issues of GOVERNMENT SECURITIES will receive prompt attention. A COMMISSION OF ONE-EIGHTH OF ONE PER CENT. on the

5-20 BONDS

Will be allowed to Banks, Bankers and others.

GIBSON & PALMER,

COMMISSION MERCHANTS,
AGENTS FOR SALE OF

RAILWAY IRON

EQUIPMENTS,

PERU IRON

AND
AMERICAN STEEL,

54 William st., NEW YORK.

CHARLES D. GIBSON.

RICHARD S. PALMER.

BROWN'S ENGLISH ROOFING PAINT.

THIS pure Black Paint is superior to all other Black Roofing Cements, Mastics and Patent Roofings now in use; and, for the last ten years, the genuine has been used in twenty-four States of the Union, and is now a fixed institution for the following purposes:—

THE PAINTING OF TIN, SHEET IRON, COPPER OR ZINC ROOFS, GALVANIZED IRON, BRIDGES,

LOCOMOTIVE

AND STEAMBOAT SMOKE PIPE.

And all IRON WORK requiring a PERFECTLY PURE GLOSSY BLACK, exposed to weather and fire.

It has been in general use in England for the last ten years, for the protection of Vessels' Bottoms from the water and the worm, for which it is particularly well adapted. For sale by the barrel or gallon.

SAMUEL REYNOLDS,
PROPRIETOR.

Depot, 279 Third Avenue, New York.
All Orders promptly attended to. Best City References given.

Central Transportation Co.

THIS Company, a Corporation organized in pursuance of a General Act of the Legislature of the State of Pennsylvania, having, by purchase, recently become the sole owner of

WOODRUFF'S, KNIGHT'S, MYERS' AND OTHER PATENTS FOR SEATS AND COUCHES IN SLEEPING CARS,

would respectfully give notice to all RAILROAD COMPANIES IN THE UNITED STATES, that they may desire Sleeping Cars on their Roads, that this Company are now prepared to negotiate for placing, wholly at its own expense, on such Railroads as may require them, their

SLEEPING CARS,

and operate them upon terms at once liberal and satisfactory to RAILROAD COMPANIES.

The Cars of this Company are constructed of great strength, and contain their late improved and patented plans of Seats and Couches, with STATE ROOMS AND BERTHS, finished in a style the most elaborate and tasteful, and are furnished with all of the modern conveniences and means of comfort usually found in the SLEEPING APARTMENTS OF OUR FIRST-CLASS HOTELS. The interior is lighted with gas; they are well ventilated, and at seasons of the year requiring it are warmed with pure heated air, regulated in degree at pleasure by registers in each State Room and section.

Where known, these Cars are not only regarded as indispensable on all through NIGHT TRAINS, but have become desirable, above all others, as DAY CARS.

Communications from the officers of Railway Companies desiring Sleeping Cars on their Roads, addressed to the Central Transportation Company at their office, No. 1347 Brown

St., PHILADELPHIA, will receive immediate attention. Railway Companies using, or permitting to be used on their respective lines, Sleeping Cars or Couches, that infringe upon the patents owned by this Company, are respectfully notified that satisfactory arrangements for such infringement will be expected. Address as above.

O. W. CHILDS, President.

KING'S NOTE ON STEAM. LESSONS AND

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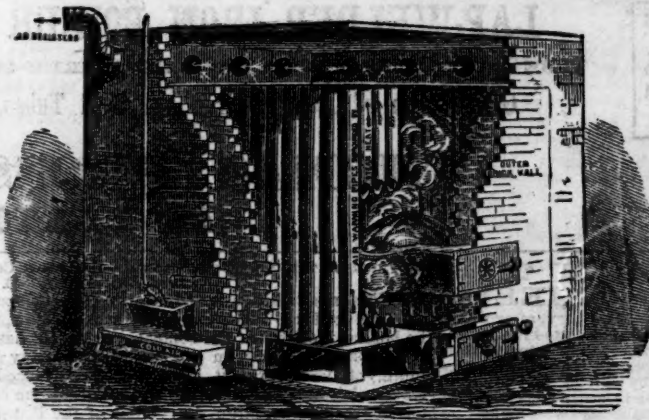
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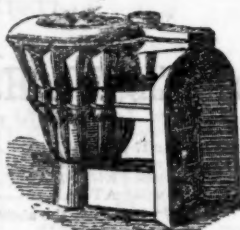
OFFICE OF THE NEW YORK CENTRAL RAILROAD Co.,
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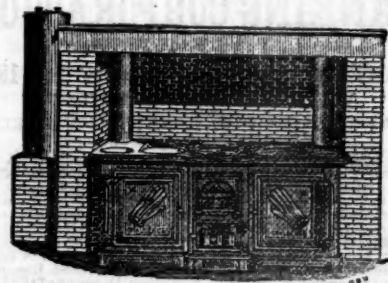
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